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ABSTRACT

The SPAN Project was developed as an exemplary career education project to serve grades K through 12. The program consisted of three components: one at the elementary grades, one for middle or junior high grades, and a component to service the senior high school students. The original title, "An Accelerated Project for a Systems Program Approaching Non-Unemployment of Vocational Students," was discontinued. The acronym SPAN remained and the project to "span" the gap between school and work eventually became SPAN: Start Planning Ahead Now. For elementary and secondary education, the program includes a structuring of basic subjects, grades 1-12, around the theme of career opportunities and requirements in the world of work. In elementary school, students are informed about the wide range of jobs in our society and the roles and requirements involved for employment. Junior high school students explore career clusters through hands-on experience, while senior high school students pursue their selected occupational areas. Reference to this project should be noted through the final report of SPAN (ED087855). (DS)

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EVALUATION REPORT, 1972-73

Project No. 0-361-0115; Contract No. OEC-0-70-5181

SPAN: An Accelerated Project for a Systems Program Approaching non-Unemployment of Vocational Students

Exemplary Project in Vocational Education Conducted Under Part D of Public Law 90-576

† † †

Administrative Director
Dr. C. M. Achilles, BERS
The University of Tennessee, Knoxville

Evaluation Team:

Dr. Robert K. Roney, Evaluation Coordinator
The University of Tennessee, Memphis Center

Mr. Francis Gross, Consultant
The University of Tennessee, Knoxville

Ms. Doris S. Lyons, Consultant
Graduate Assistant, BERS
The University of Tennessee, Knoxville

Dr. Douglas Norman, Consultant
Upper Cumberland Reading Project

Dr. John Ray, Consultant
The University of Tennessee, Knoxville

Compiled and Edited by Doris S. Lyons, Bureau of Educational Research and Service, The University of Tennessee, August 1973.

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I. INTRODUCTION: PROJECT SPAN* AND ITS EVALUATION

Project SPAN was an exemplary project in vocational education funded under Part D of the Vocational Education Amendments of 1968 (PL 90-576) during the first round of program fundings for Exemplary Project in 1970. It was selected in national competition. Funds for this Project, unlike part of the funds for exemplary projects, came directly from the U. S. Office of Education (USOE) to the Vocational and Technical Education Division of the Memphis City Schools. (Under the Exemplary Project funding pattern, each state in the first round of funding could have one project supported directly from the USOE and one or more projects funded by the State's Division of Vocational and Technical Education.)

The SPAN Project was developed by personnel of the Memphis City Schools as an exemplary career education project designed to serve grades K through 12. The project embodied the basic career education stages as exemplified and espoused in literature and theory: a component at the elementary grades; a component for middle school or junior high school aged students; and a component to service the senior high school students. These basic components are described in the following passage:

> For elementary and secondary education, the program includes a structuring of basic subjects, grades 1-12, around the theme of career opportunities and requirements in the world of work. In elementary school, students are informed about the wide range of jobs in our society and the roles and requirements

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*The original title, "An Accelerated Project for a Systems Program Approaching Non-Unemployment of Vocational Students," was discontinued. The acronym SPAN remained and the project to "span" the gap between school and work eventually became SPAN: Start Planning Ahead Now.

> involved for employment. In junior high school, students explore several specific clusters of occupations through hands-on (psychomotor) experiences as well as through classroom instruction. At the senior high school level students pursue their selected occupational areas, exercising one of three options: (1) intensive job preparation for entry into the world of work immediately upon leaving high school, (2) preparation for post-secondary occupational education in a technical school or formal apprenticeship program, or (3) preparation for a four-year college of university.*

A major purpose of Project SPAN was to develop and implement a program in the public schools to help students plan and prepare for their future life and work and to help bridge the gap between academic activities of the school and the realities of the world of work.

In making a needs assessment upon which the proposal for SPAN funds was based, Memphis City schools collected evidence which indicated that:

1. The school system had within its geographical area predominantly black neighborhoods. Children from these neighborhoods often were from families with low socioeconomic backgrounds and were culturally, socially, and economically disadvantaged. They tended to have a number of special needs.

2. Dropouts were a serious problem in target schools, although relatively few students who had what their instructors judged to be saleable vocational skills left school before graduation.

3. A large number of Memphis high school graduates were attempting to enter the work force without vocational training. Those who did have such training were more successful in obtaining initial job placements. Students from target-area schools who did not have vocational

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*Howard Conley, "Career Education in Rural Schools," ERIC/CRESS Newsletter (Fall, 1972), p. 1.

training were less successful in getting jobs than similar students from non-target schools.

4. There was a need for "quick shot" approaches for giving potential dropouts some basic job skills and attitudes needed for successful job performance.

5. There was no organized student-centered occupational orientation program in the school system.

6. Vocational training in the middle and high school grades would be more successful with the target population if students could develop a realistic concept of work and different job opportunities open to them while still in the elementary grades.

Accordingly, global, or general, objectives were developed for Project SPAN based upon these needs. The objectives were:

1. To develop a comprehensive and continuing program of occupational guidance information and techniques which will, in all grades of school, insure that the maximum number of students in need of vocational training will enroll in such programs and that they will be helpful to bridge the gap between going to school and earning a living.

2. To develop a series of "hands on" and soft education units which will insure maximum relevance of education and skills for entering into employment.

3. To develop within the student a desire to stay in school and obtain a general education and skills for entering into employment.

4. To develop within the student the ability to appraise his occupational goals in a manner equal to his abilities, desires, and the forecasted needs of industry.

5. To develop an overall program of positive relationships with community, parents, consultants, and volunteer workers which will give students an enriched outlook on the world of work.

6. To develop all programs so that the following characteristics prevail:

a. Student develops self-understanding and self-awareness.

b. Student recognizes and makes fuller use of the his capabilities.

c. Student develops positive adjustment to school, community, and home environments.

d. Student develops self-confidence and self-esteem.

e. Student develops the ability to make wise decisions.

7. To develop a series of personal inventories which, when given at grades 6, 9, and 12, will indicate realistic soundness of vocational choices.

8. To develop a complete follow-up study which will test the relevance of the total project.

Project SPAN was organized with three components, one each to serve children on the elementary, middle, and high school levels. Specific objectives were formulated for each component, and they are given in the sections of this report discussing the three parts of the project.

To help implement the program, a director, an elementary curriculum specialist, and a middle school curriculum specialist were employed to serve all schools in the project's target area. At the high school level, one person was employed to develop a computerized job information and job placement program and also to provide vocational guidance and personal counseling for students. There also were two cooperative program coordinators, who directed students' work-study programs and had among their

duties the contacting of prospective employers and placement and supervision of students in part-time jobs. Two coordinators were employed to serve a similar function on the middle school level. To help implement the elementary school component, nine technical apprentices and instructional aides were employed. Their major function was to visit the elementary schools served by the project and to assist teachers with a series of activities designed to help introduce young children to simple hand tools and to help them make simple items which would improve both their knowledge of tools and materials associated with different occupational fields and their manipulative skills.

Different procedures were associated with the three components of Project SPAN. The elementary school phase was designed to provide basic career education information to a group of disadvantaged, predominantly black children and to stress positive attitudes toward the world of work. This program was expanded in the middle school, with emphasis on the kind of training needed for the students considering entering different job fields. Over-age students who were considering dropping out of school were provided with work-study experiences, and the kinds of attitudes and personal development needed for successful entry and advancement through various occupational fields were stressed. The services of the project became more varied and complex in the high school grades as students neared the time when they would leave the classroom and enter an occupational field. Project activities in high school included:

1. Cooperative classes in which students receive information about basic skills needed to get and hold jobs, and in which the necessity for acceptable attitudes and job performance are stressed.

2. "Quick shot" courses for seniors about to enter specific jobs in which skills and knowledge related to those jobs are discussed.

3. Work experiences during school hours as part of the cooperative program. SPAN personnel were responsible for placing students participating in the co-op program in jobs and supervising their on-the-job training and performance.

4. Summer school programs for those not enrolled in regular vocational classes and not going to college. Basic skills needed to get and hold a job are stressed.

5. Development of information packets for counselors on different occupational fields.

6. Development of a computerized job information and placement program for seniors.

7. Coordination of SPAN with incoming Project INFOE, a program combining data processing and microfilm techniques to help the student find localized information about job opportunities in various fields. The program is similar to the VIEW component developed by the Appalachian Educational Laboratory. Information is delivered to students via microfilm readers and reader/printers.

Project SPAN has developed a variety of other printed materials in addition to those mentioned above. These include the following:

1. An occupational orientation guide for teachers of grades 4, 5, and 6, to use with the 10 guidance films developed for elementary school children. These guides typically contain suggested units of study built around the films, exercises for pupils relating the films to such content areas as language arts, science and mathematics, and suggestions for the

making by pupils of simple objects, such as electric motors or scrapbook covers.

2. A Curriculum Guide for Occupational Orientation and Exploration in Junior High School Home Economics and Industrial Arts includes discussions of specific jobs within each of these occupational fields.

3. A Career Development Worktext for Junior High School Students emphasizes the need for personal development, planning for the future, choosing a field suited for the pupil, and information on how to apply for a job.

4. A Course of Study for General Cooperative Education was developed to aid high school teacher-coordinators of cooperative education in providing general employment information to young beginning employees, regardless of their occupational objectives.

5. Outlines for "quick shot" courses were designed to help prepare high school students for specific jobs.

Funds budgeted for each of the first two years of the project were as follows:

1970-71	$111,605
1971-72	166,495
1972-73	151,900
TOTAL.	$429,000

Of these funds, 100 percent were provided under the federal act mentioned at the beginning of this chapter. In-kind contributions by the Memphis school system were not itemized in the project's budget documents. It should be emphasized that the vocational guidance films developed by the

project for the elementary grades were available for use by all schools within the viewing area of the Memphis public television station in West Tennessee, Arkansas, and Mississippi, as well as in non-target schools in the Memphis-Shelby County area. The publications previously mentioned also were available for use by non-target schools and a number of other Memphis schools did utilize them and the films. Thus, it is nearly impossible to obtain an accurate estimate of the total pupil population served by SPAN.

In seeking third party evaluation SPAN personnel solicited evaluation bids according to specifications. The Bureau of Educational Research and Service (BERS), College of Education, The University of Tennessee, Knoxville, submitted the bid which was awarded the SPAN evaluation contract. Evaluation efforts covered the three years of the Project's duration. Evaluation moved from attempting to establish a design for evaluation, to collection of baseline data, evaluation of process and context, formative or monitoring activities, and finally to summative or product evaluation. Career education, a new concept, necessitated some experimentation to obtain satisfactory instruments and to establish adequate evaluation design.

The basic evaluation design included a combination of elements: selection and use of control groups for comparison purposes; some utilization of a pre-/posttest design (population and sampling)to attempt to measure increases which might be attributed to the exemplary project; and some posttest analyses. Basic instrumentation for the evaluation, besides especially made questionnaires, included the Gordon Occupational Checklist, the Crites Vocational Development Inventory (VDI), and an adaptation of the

Westbrook Vocational Maturity Scale. The Westbrook was adapted to make the language more suitable for elementary school pupils and, through a process of random selection, items from the Westbrook were arrayed into six subtests of 20 items each. A multiple-matrix, random sampling design was used to distribute the subtests throughout a large population (control and experimental). Other sources of data were interviews, site visits, reviews of materials, and review of management/administration activities.

Basic monitoring of project administrative techniques relied upon the completion of quarterly and interim reports as required by the USOE within the proper time frames. Also, evaluation personnel visited SPAN to observe project staff in operation and observed various other administrative procedures. A discussion of the evaluation of these efforts is provided in a proper section.

One major purpose of exemplary projects, over and above an attempt to get a new program underway, is that the results of the program need to be disseminated widely. Several attempts to disseminate pertinent information relative to SPAN were undertaken and evaluated. A Final Report section on "Dissemination" includes evaluation of these dissemination activities.

Throughout the duration of the project evaluation several problems occurred which caused concern to the evaluation staff. These problems ran the gamut from "slightly irritating" to "of major concern" in terms of affecting the validity of the evaluation. For example, although a multiple matrix sampling design is highly dependent upon complete randomization both of items for the subscales and for distribution of

those items across the population, there were obviuos disruptions on the part of the SPAN staff with the process. (More detail is provided in the specific section.)

In general, SPAN made some significant beginnings in career education in the Memphic City Schools. Although there were some problems, a general rating would suggest that the project satisfactorily achieved the majority of its objectives. One must necessarily remember that SPAN was a beginning--a prototype. Other career education projects will have advantages because they will be able to draw upon the knowledge generated by projects such as SPAN and avoid many of the errors inherent in new programs.

Evaluation efforts included a number of personnel. Overall direction was through the Bureau of Educational Research and Service (BERS) of the College of Education, The University of Tennessee, Knoxville. The Tennessee Research Coordinating Unit for Vocational Education provided valuable assistance. The following persons assisted in evaluation efforts:

Dr. Charles Peccolo, Director, BERS
Dr. Charles Achilles, Coordinator for Field Services, BERS, and overall evaluation director for SPAN
Dr. Robert Roney, Director, UT Center in West Tennessee (Memphis) and on-site director of SPAN evaluation
Dr. John Ray, Associate Professor, Curriculum and Instruction, The University of Tennessee, responsible for data processing
Dr. Douglas Norman, Director, Upper Cumberland Reading Project
Dr. Gary Bice and Dr. Walter Cameron, Tennessee RCU
Ms. Doris Lyons, Graduate Assistant, BERS
Mr. Francis Gross, Institutional Research, UT System

Special thanks is extended to Project SPAN staff, personnel of the Memphis City Schools Division of Vocational Education, all of the teachers and administrators who participated in the evaluation effort, and all of the pupils who responded to evaluation instruments.

It should be noted that during the course of the three year exemplary project there was considerable unrest in the school system and a number of things happened which had a negative effect on student and teacher morale. During this period the Memphis City School System was in the process of decentralizing its organizational structure. As might be expected, there were times when lines of authority and responsibility were not completely clear. This had little direct influence on Project SPAN since lines of communication were well-defined for the project--its function was not decentralized--but indirectly, through general uncertainty on the part of teachers and principals, it had a distracting effect.

More serious, however, were the disruptive effects of the series of steps taken in the desegregation of the school system. During the three years in question (1970-73) several court orders were handed down and implemented. Many teachers were transferred into entirely new teaching situations and were expected to adjust, with little preparation, to students with vastly different backgrounds than those these teachers had previously taught. Students also were shifted into new situations, often more than once during this period. The climax of the situation came in January of 1973, halfway through the third year of the project, when the first busing was implemented to further desegregate the schools. Not only were some of the SPAN teachers and students effected directly as they were transferred to new schools, but in the other schools there was considerable unrest attributable to the emotional nature of the issues being discussed at school, at home, and in the community. Many otherwise receptive teachers and students were distracted by this volatile issue.

There was an exodus from the school system of several thousand, mostly white, students and many who remained were upset and difficult to motivate. Among the target area schools, Cypress, Carnes, and Springdale were affected the most directly as each of these schools gained, lost, or exchanged students with other schools. Westside also was affected because the plan announced for the 1973-74 school year heavily involved them.

The effect on the evaluation of a project like SPAN by these uncertainties and disruptions is impossible to measure or adjust. This, then, becomes a major, but unavoidable, limitation of the report.

II. ELEMENTARY COMPONENT

Summary

Project SPAN was designed to serve as an exemplary career education program for grades K-12 and to help meet the needs of inner-city pupils. It had three distinct components for elementary, junior high, and high school students. The elementary phase was designed to make pupils aware of broad career fields and to be the first step in a sequential program leading to career selection and placement by and for high school graduates. The principal vehicle for creating career awareness was a series of television programs produced by SPAN and Memphis' educational television station. Duplicated study guides were produced to help teachers plan preliminary and follow-up activities for use with the TV programs. The elementary component of SPAN also sought to increase teachers' occupational sensitivity. A major result of process evaluation was reducing the number of elementary schools served by SPAN and setting up three demonstration centers, each with a full-time career education resource person. The component was judged to have satisfactorily achieved its objectives, and the objectives were assessed as having legitimacy and value in light of the project's context.

Objectives

Specific objectives for the K-6 component of Project SPAN, as given in the project's original proposal, essentially were open- or activity-oriented in nature. They dealt with inputs of the project in the elementary grades rather than with anticipated outcomes. The objectives, which were unchanged during the entire three years of Project SPAN, were as follows:

1. To develop a series of guidance films for educational television (ETV) which were designed to give maximum emphasis to preparing a youngster to select realistic life goals leading toward specific educational preparation in the middle and high school grades.

2. To develop "educational inserts" (printed materials) which would correlate the ETV film series with other television programs and curricular elements in the science and social studies areas.

3. To develop a program of "hands-on" activities (in which children worked with simple hand tools and made simple objects) which tended to improve manipulative skills during the pupils' early years.

4. To develop a high degree of occupational sensitivity within the elementary school teacher.

Scope of Program

During the first two years, the project attempted to expand its services to as many elementary schools as possible within the inner-city area of Memphis. By the end of the second year (1971-72), 15 elementary

schools were participating in the elementary component. No full-time career education teachers were provided for the participating schools by the project. Instead, it sought to work through the permanent teachers in target schools through services provided by special personnel to help these teachers implement the career awareness phase of a career education program. An elementary curriculum specialist was employed by the project to develop printed material used with the ETV programs and in other career awareness activities. Nine technical apprentices and instructional aides were also employed to go from school to school to assist regular teachers in implementing planned procedures for the elementary school component, especially manual or hands-on activities for use with the ETV programs and special units of study planned by the teachers.

At the beginning of the third year (1972-73), the number of elementary schools served by Project SPAN was cut from 15 to three. This action was in response to process evaluation and recommendations in the 1971-72 evaluation report. Among these were the following:

> 1. That the scope of the elementary component be narrowed so that it can concentrate on developing a few exemplary centers. The present scope (during the first two years of the project) is such that, in all probability, this development cannot occur. The average contact between SPAN aides and pupils at target schools was only two or three hours each month. That this occurred is no criticism of project officials, nor of the personnel involved; there were simply too many children in too many schools for available personnel to concentrate their efforts on any one group. A workable solution would appear to be to reduce the number of schools served by the elementary component from the present 15 to about three. This recommendation would enable the project staff to work closely with students and teachers in helping them understand the methods and the underlying philosophy of Project SPAN and to concentrate their efforts on a small group of students, so that the impact of those efforts could be adequately measured.

2. That each center be staffed with a full-time career education specialist who can work with pupils of the entire school, with their teachers, and with visitors who wish to observe and perhaps participate in the activities of an exemplary career education program in the lower grades. It also is recommended that time be made available, if needed, for the specialist to visit other Memphis city schools to help them use the SPAN program.

3. That the career education specialist work closely with other teachers at the demonstration school to help them properly use SPAN materials, including such activities as preparation of pupils for doing televised guidance films, follow-up discussions using printed inserts which have been correlated with the inquiry approach of the films, and actual experience in the use of simple hand tools and materials in making items related to different career fields.

4. That each center be equipped with a working television receiver, an ample supply of printed material related to the films, tools and materials needed for the hands-on experiences, and with other available materials on career education of interest both to teachers and children at the demonstration school and to visiting educators.

Procedures for Meeting Objectives

The first three objectives of the elementary component were concerned with developing a series of programs to be broadcast by ETV and related printed materials and manual arts or hands-on activities to be used in connection with the programs. These objectives and procedures were in keeping with the career awareness emphasis of the elementary program. During its first year, Project SPAN entered into a contractual agreement with Station WKNO, the public educational television outlet in Memphis, to produce 10 15-minute guidance programs designed to introduce elementary school pupils to the world of work and to a number of career clusters. The programs also sought to improve pupils' opinions of persons working in these fields and to develop the children's confidence in their ability to get worthwhile jobs when they finish school.

Work on the series was begun in 1970-71 and completed during the second year of Project SPAN. Some of the films were telecast on a pilot-test basis during the first year of the project, and the entire series of 10 programs was shown during both 1971-72 and 1972-73.

Curriculum specialists on SPAN's staff also developed a series of printed materials used to introduce the television programs to pupils, to stimulate follow-up discussions, and to relate the programs to such content areas as science, social studies, language arts, and mathematics. These materials were duplicated and distributed to teachers in target schools. A sample set of such materials was included in Appendix A of the 1971-72 evaluation report. These duplicated materials also contained descriptions of suggested manual or hands-on activities which could be done by the elementary school students and which would help them relate to the various career clusters portrayed in the ETV programs. Hands-on experiences suggested included making wooden covers for scrapbooks, laying brick, making simple electric motors, using simple drafting tools, and replacing faucet washers. During the first two years of the project, the hands-on experiences were conducted at target schools with the assistance of itinerant technical and instructional aides provided by the project. During 1972-73, the project's final year, assistance for these activities was provided by SPAN resource teachers in the three demonstration centers which were established.

To meet the fourth objective of the elementary component, a series of workshops for teachers was held. Members of the project staff also worked on a one-to-one basis with individual instructors at target schools to help them develop greater understanding and support for career education in the lower grades.

Instructional Activities

The 10 television programs developed by Project SPAN and WKNO in the career awareness phase of the exemplary career education program dealt with the following topics:

1. "Why We Work"--an orientation film to introduce elementary school pupils to the world of work.
2. Construction occupations.
3. Transportation occupations.
4. Health occupations.
5. Office occupations.
6. Communications occupations.
7. Manufacturing occupations.
8. Sales occupations.
9. Food services occupations.
10. General service occupations (such as Fire and Police departments).

During the second and third years of Project SPAN, each of these programs was shown three times by Station WKNO. Each program was telecast three times and could either be viewed in the target schools as it was telecast or, if a more convenient time were desired, as a kinescope (filmed copy) of the television videotapes which could be shown on a 16-mm. sound projector.

General goals of films were to acquaint target school children in grades five and six with the nine career clusters which were featured, to emphasize jobs for which the children could reasonably be expected to have interests and aptitudes, and to help pupils develop positive personal attitudes for work through the showing of gainfully employed persons from different backgrounds.

Classroom activities related to SPAN television programs were broken down into three categories: (1) preparing pupils to view the programs; (2) follow-up class discussions about what had been televised; and (3) using printed materials developed by SPAN and hands-on activities suggested in the materials.

Evaluation of SPAN Programs and Related Materials and Activities

Evaluation of the ETV programs, related printed materials, and hands-on activities was substantially completed in 1972 and was reported in the second year's evaluation document. These activities were related to three of the four objectives for the elementary component as contained in the original project proposal. Reference is made to evaluation information and data on pages 10 through 27 of the 1971-72 evaluation report.

No attempt will be made in this document to duplicate the extensive evaluation report on the ETV programs and related materials and activities. Two rating scales were developed for use in evaluating each program; one was based on criteria for occupational films developed by the National Vocational Guidance Association (NVGA), and the other was a locally made instrument for rating technical aspects of the programs. A panel of three outside evaluators viewed all the programs on monitors at the studios of Station WKNO. Quality of the films was judged to be consistently high, both in technical aspects and in adherence to NVGA standards. Feedback collected from teachers in target schools during 1971-72 indicated that the programs were not reaching all pupils for whom they were intended. Two causes appeared to be the lack of working television receivers in classrooms and the irregular scheduling of films

by the ETV station. As a result of this feedback and other information from teachers, it was recommended that the number of target schools in the elementary component be cut from 15 to three and that a full-time career education resource teacher be assigned to each school by the project. These changes were designed to insure that all target pupils would have access to the television programs and related material and that target-school teachers would receive assistance from full-time career education resource persons.

The same feedback questionnaire given target-school teachers in 1971-72 was administered to faculties of the three demonstration schools in 1972-73. Findings indicated that there was a substantial increase in the number of SPAN television programs seen by pupils and in the amount of time spent in preparatory and follow-up activities. There also was an increase in use of duplicated materials. A comparison of teachers' responses to 1971-72 and 1972-73 feedback instruments is given in Table II-1.

As a result of the development of materials discussed in preceding paragraphs, it was concluded that three of the four objectives of the elementary component had been met by the end of the project's second year. It should be pointed out again that the objectives were written so that the quality of the print and audiovisual materials was not a factor, although this was judged to be quite high, especially considering the limited amount of funds available for the television programs. It should also be reemphasized that objectives were stated in terms of project inputs rather than outcomes, so that there were no standards by which to judge the effectiveness of the material on the target school children.

The fourth objective--to develop a high degree of occupational

TABLE II-1

TEACHER FEEDBACK AND ATTITUDE RESPONSE FOR SELECTED ITEMS: SPAN ELEMENTARY SCHOOLS*

Abbreviated Item	Response	1973 (N = 38) Number	1973 (N = 38) Percent	1972 (N = 63) Number	1972 (N = 63) Percent
Is there a workable television in your classroom?	No Response (N/R)	2	5%	2	3%
	Yes	28	74	20	32
	No	8	21	41	65
If not, do you have access to a TV for SPAN?	Not applicable (N/A), N/R	26	68%	15	24%
	Yes	9	24	43	68
	No	3	8	5	8
How many SPAN films have you viewed this year?	None	1	3%	8	13%
	1 - 3	9	24	14	22
	4 - 6	7	18	32	51
	7 -10	21	55	8	13
	N/R	0	0	1	2
Were films shown at convenient times?	N/R	5	13%	6	10%
	Yes	28	74	21	33
	No	5	13	36	57
How much average weekly time did you spend preparing pupils to view the films?	N/A, N/R	3	8%	20	32%
	Less than 30 minutes	10	26	31	49
	30-60 minutes	20	53	12	19
	More than 60 minutes	5	13	0	0
How much average weekly time did you spend discussing films?	N/A, N/R	3	8%	16	25%
	Less than 30 minutes	13	34	35	56
	30-60 minutes	17	45	12	19
	More than 60 minutes	5	13	0	0

*Full Questionnaire is provided in Appendix A.

TABLE II-1 (Continued)

Abbreviated Item	Response	1973 (N = 38) Number	1973 (N = 38) Percent	1972 (N = 63) Number	1972 (N = 63) Percent
How much average weekly time did you spend using SPAN printed materials?	N/A, N/R	3	8%	8	13%
	Less than 30 minutes	11	29	28	44
	30 - 60 minutes	16	42	24	38
	More than 60 minutes	8	21	3	5
Did you use SPAN kinescopes?	N/A, N/R	7	18%	14	22%
	Yes	14	37	9	14
	No	17	45	40	64
How many kinescopes have you seen?	N/A, N/R	16	42%	Too few "yeses"	
	1 - 3	14	37	to previous item	
	4 - 6	8	21	for computation	
	7 -10	0	0		
Did you regularly stay with your pupils when they met with the SPAN teacher? (combination of two questions)	N/A, N/R	22	29%	52	41%
	Yes	48	63	43	34
	No	6	8	31	25
Effectiveness of SPAN teacher?	N/A, N/R	0	0%	4	6%
	Ineffective	1	3	2	3
	Effective	6	16	37	59
	Very effective	31	81	20	32
Did your principal know of and support SPAN?	N/A, N/R	6	16%	9	14%
	Yes	31	81	45	72
	No	1	3	9	14

sensitivity among elementary teachers--did imply an unspecified degree of change among project recipients. The 1971-72 evaluation report contained a report on the data from a locally designed instrument given to three groups of teachers in an effort to measure any changes in their degree of occupational sensitivity (pages 11 through 19). The instrument was given to a group of SPAN teachers who had recently completed a special summer workshop, a second group of SPAN teachers who had not been to the workshop, and a third group of teachers not affiliated with the project who served as a control. The results of this study, as explained in the second year's evaluation report, indicated that SPAN teachers who had attended the workshop showed a higher degree of sensitivity toward a broad spectrum of jobs than did the SPAN teachers who had not attended the workshop and those in the control group. It was concluded that special workshops were helpful in meeting this objective and their continuation was encouraged.

The same instrument was given to teachers in six SPAN schools near the end of the project's final year. Findings, as given in Table II-2, indicate that the 1972-73 sample displayed greater occupational sensitivity than the 1971-72 control group and non-workshop SPAN teachers, but not as much as those who attended last year's workshop. It was concluded that the value of workshops to increase occupational sensitivity was reinforced, although it appears that continued service in a career education program also results in increased sensitivity. The permanence of change effected through the workshop is uncertain, since no follow-up study of the 1971-72 workshop participants was conducted.

TABLE II-2

A COMPARISON OF INDICES OF OCCUPATIONAL SENSITIVITY AMONG SPAN AND NON-SPAN TEACHERS

1971-72 Teachers		1972-73 SPAN teachers	Index
Workstop Participants	7.96	Elementary	7.52
SPAN Elementary Teachers	7.17	Junior High	7.52
Control Teachers	7.34	High School	7.31

Teachers' Rankings of Academic and Career-Related Subjects

Teachers in SPAN schools served by all three project components--elementary, junior high school, and senior high school--were asked in 1972-73 to rank in terms of importance to their students eight subjects, four in the traditional academic realm and four which were related to four career clusters. The former were English grammar, mathematics, science, and social studies. The latter were construction occupations, consumer homemaker occupations, manufacturing, and transportation occupations. Mean ratings and rankings of the eight subjects by elementary, junior high school, and senior high school teachers are found in Table II-3. A copy of this instrument in included as Appendix A.

The rankings fall into two distinct categories. All three groups of teachers ranked the four academic subjects as more important to the needs of their students than the four career-related subjects. English grammar was ranked as most important by elementary, junior high, and high school teachers. Modal rankings for the other academic subjects were as follows: mathematics, second; science, third; and social studies, fourth. For the career-related subjects, modal rankings were,

in order, consumer-homemaker occupations, construction occupations, manufacturing, and transportation occupations.

TABLE II-3

SPAN TEACHERS' RANKINGS OF ACADEMIC AND SPECIFIC CAREER-RELATED INSTRUCTIONAL AREAS ACCORDING TO PERCEIVED IMPORTANCE

Subject	Elementary Mean	Elementary Rank	Junior High Mean	Junior High Rank	Senior High Mean	Senior High Rank	Modal Rank
English Grammar**	3.5	1	2.8	1	2.0	1	1
Construction Occupations*	6.2	8	5.8	6	5.7	6	6
Consumer-Homemaker Occupations*	5.6	5	5.6	5	4.5	5	5
Manufacturing*	6.1	7	6.3	7	6.0	7	7
Mathematics**	3.5	1	3.2	2	2.4	2	2
Transportation Occupations*	6.0	6	6.9	8	6.2	8	8
Science**	5.0	3	4.9	3	4.2	3	3
Social Studies**	5.1	4	5.3	4	4.4	4	4

*Career-Related subjects. **Academic subjects.

The rankings were similar to those of the same subjects by another group of SPAN teachers in 1971-72. It could be concluded that even though SPAN teachers had increased in occupational sensitivity, as indicated by Table II-3 they still believed that basic academic subjects were vital as foundations for career-related subjects. Another conclusion could be that three years' participation in a career education program is insufficient to change perceptions of academically-oriented teachers, even in light of the special needs of inner-city students. They

teach as they were taught.

The results of the 1971-72 and 1972-73 testings are such as to suggest that substantial progress has been made toward completing the elementary component's fourth objective. As with many programs designed to change attitudes, it is difficult to determine the depth or permanence of increases in occupational sensitivity among teachers. It may be speculated that a longer and more intensely personal exposure to the principles of career education might be necessary in order to change the attitudes of elementary school teachers who have had little exposure to or experience with occupations which do not require academic training. A follow-up study of the permanence of the indicated change in teachers' attitudes toward the world of work certainly would be in order. Given the problems in determining the degree and nature of change in such an ill-defined area as occupational sensitivity, it nevertheless appears from the data available that the fourth objective of Project SPAN's elementary component was met to a satisfactory degree.

Benefits of Program Not Covered by Objectives

There are some beneficial aspects of the elementary component of Project SPAN which were not targeted in the component's objectives. Among these are relating content-area subjects to the world of work (which, it is hoped, will make these subjects more meaningful to inner-city children) and increasing students' knowledge of careers. The career education model demonstrated by Project SPAN is intended to be a vehicle for instruction. Rather than being a separate course of study, career education becomes a means for infusing the regular curriculum with new ideas and new meaning. Project SPAN recognized this and encouraged teachers to develop a series of units to relate career clusters to content areas. Although improvement in classroom instruction is not mentioned

in the objectives of the elementary component, it was one of the major goals, either stated or unstated, of the career education model being demonstrated by the project. Besides creating awareness of the world of work among young pupils, a major purpose of career education in grades K-6 may be said to be improvement of instruction by making more apparent to pupils the link between such subjects as mathematics, science, and language arts with the various occupations. The use of various occupations as a basis for lessons and units of study in different content areas also provides teachers with fresh sources of ideas for motivating students and presenting information.

There are no hard data available to substantiate the degree to which Project SPAN has accomplished this improvement in its target schools. The assumption must be, however, that there was more teaching of this type in target schools as a result of Project SPAN than before the project began. This was confirmed by observations of outside evaluators in target schools, especially in the demonstration schools which were established in 1972-73 as a result of earlier process evaluation.

A significant increase in the level of pupils' knowledge of different careers was indicated by an instrument given to a sample of SPAN pupils in 1973.

In an attempt to measure the knowledge of vocations among elementary school pupils in grades four through six, a multiple-matrix sampling technique was used. In this technique, the Westbrook Vocational Maturity Scale (120 items) became the pool of items. These 120 items were randomly assigned to six subtests of 20 items each. Youngsters in grades four, five, and six of four elementary schools were the pupil population. Three

of the schools participated in Project SPAN; the fourth school served as control. The six subtests of the revised Westbrook Scale were scheduled for random distribution among all youngsters in the total population. Arithmetic computations could provide an estimate of the vocational knowledge of the total population, and appropriate data manipulations an estimate of the knowledge of the various sub-populations.

NOTE: There is some concern about the total accuracy of the following computations due to the fact that the SPAN staff did not completely follow the initial design for the distribution of 10 of the subtests. However, due to the large number in the sample, it was determined that the data would be presented and analyzed as though the initial design had been carried through. The exact number of cases where the initial design was deviated from is not certain, and certain *a priori* considerations in the initial data tabulations suggest that the data do provide an accurate picture for gross analyses. For example, the mean score for grades four, five, and six increase correspondingly--a probable phenomenon of reading level on the subtests. (The original Westbrook Scale was slightly modified in an attempt to meet a fourth-grade reading level; however, many youngsters in the inner-city schools were not reading up to grade level.) A copy of this instrument is included as Appendix B.

The Mallory School provided a control group, and a *t*-test was used to compare this school with the three target schools. Results of those tests show a statistically significant difference between the means of the control group and each experimental group. These results are shown in Table II-4, and a *t*-test was computed between the means of the total SPAN school population and the non-SPAN school population. A significant

TABLE II-4a

COMPUTATION OF SIGNIFICANCE OF DIFFERENCES IN MEANS OF SELECTED SCHOOLS ON THE MULTIPLE-MATRIX DESIGN, REVISED WESTBROOK OCCUPATIONAL MATURITY SCALE (t-TEST)

Groups (Schools)	df	N (Pupils)	Mean	Standard Deviation	t-Value
Mallory (control)		145	7.13	3.45	4.24*
Klondike (SPAN)	341	198	8.93	4.43	
Mallory		145	7.13	3.45	5.54*
Springdale	443	300	9.12	3.74	
Mallory		145	7.13	3.45	6.24*
Carnes	562	419	9.44	4.80	
Non-SPAN		173	7.93	4.15	3.36*
All SPAN	1022	851	9.11	4.46	

*Significant at or beyond .01.

At 120 df, $t(.0005) \geq 3.373$†
At ∞ df, $t(.0005) \geq 3.291$

†W. J. Popham and K. A. Sirotnik, Educational Statistics: Use and Interpretation (2nd edition; New York: Harper and Row, 1973), p. 384.

TABLE II-4b

WESTBROOK OCCUPATIONAL MATURITY DATA
PROJECT SPAN: SPRING 1973

Data Category	Frequency	Percent	Mean	Standard Deviation
School				
Klondike	198	18.6%	8.93	4.43
Carnes	419	39.5	9.44	4.80
Springdale	300	28.2	9.12	3.74
Mallory	145	13.7	7.13	3.45
TOTAL	1062	100.0%	8.94	4.43
Sex				
Male	510	48.0%	8.84	4.36
Female	549	51.7	9.04	4.48
No Answer	3	0.3	--	--
TOTAL	1062	100.0%	8.94	4.42
Grade				
4	383	36.1%	7.60	3.99
5	361	34.0	9.08	4.41
6	318	29.9	10.40	4.47
TOTAL	1062	100.0%	8.94	4.43
Enrollment Time				
Before this year	538	50.7%	8.69	4.15
At first of year	222	20.9	9.67	5.04
Between first of year and Christmas	62	5.8	8.66	4.45
After Christmas	218	20.5	9.00	4.30
No Answer	22	2.1	8.65	4.25
TOTAL	1062	100.0%	8.96	4.42
Race				
Black	976	91.9%	8.87	4.46
White	53	5.0	10.91	3.68
Other or No Answer	33	3.1	7.80	2.78
TOTAL	1062	100.0%	8.97	4.44
Project SPAN Participation				
Yes	851	80.1%	9.11	4.46
No	173	16.3	7.93	4.15
Don't Know or No Answer	38	3.6	8.00	2.98
TOTAL	1062	100.0%	8.90	4.42

TABLE II-4b(Continued)

Data Category	Frequency	Percent	Mean	Standard Deviation
Score Value			8.94	4.43
1	9	0.8%	Median = 8.22	
2	43	4.0		
3	52	4.9	Min = 1	
4	71	6.7		
5	83	7.8	Max = 20	
6	101	9.5		
7	102	9.6		
8	97	9.1		
9	79	7.4		
10	75	7.1		
11	55	5.2		
12	49	4.6		
13	52	4.9		
14	34	3.2		
15	46	4.3		
16	38	3.6		
17	40	3.8		
18	22	2.1		
19	11	1.0		
20	3	0.3		

difference was also observed in this t-test. The results of these tests suggest that youngsters in grades four through six of SPAN schools had a higher level of knowledge of vocational and occupational choices than youngsters not in the SPAN program. The reader must also be cautioned in considering these data that the Memphis city schools were subject to a court-ordered busing which confused the initial pupil makeup of the various schools. In addition, not all youngsters had an equal amount of exposure to the SPAN program. No correction was attempted in the data for these phenomena, since the busing was extensive.

The evaluators believe that it safely may be concluded that exposure to Project SPAN provided the youngsters in elementary school with more awareness of occupational concepts than pupils of schools where there was no emphasis on Project SPAN.

Assessment of Component Objectives

Evaluation as defined by Stufflebeam and others can involve one or more of the following:

1. Measurement of individual and group achievement through the administration of published and locally made instruments.

2. A determination of the degree of congruence between project objectives and project outcomes.

3. Determination of project outcomes through observation and professional judgment by a qualified group of outside evaluators.

It has also been stated that evaluation should consider the legitimacy and value of objectives of the program being evaluated as well as comparing outcomes against these objectives. Although such an approach may go beyond the narrow definition of "evaluation" to the somewhat

broader concept of "assessment," it perhaps is proper that, at the end of a project such as SPAN, the objectives of its various components be examined for their legitimacy as well as the congruence between them and program outcomes.

When the value of the objectives of Project SPAN's elementary component is considered in light of other programs which possibly could have been proposed in competition for limited funding, the performance objectives seem worthwhile in terms of encouraging innovative and more meaningful approaches to classroom instruction than previously had been used in many target schools and in helping elementary school pupils to become aware of and familiar with various career clusters, to see the worth of persons engaged in different occupations, to understand the link between academic subjects and desirable jobs, and to develop a greater appreciation of their own self-worth.

The elementary objectives also encouraged teachers to become more aware of the way in which academics can be related to work and the value to our society of persons who work at many different kinds and levels of careers.

While obviously not stated in precise performance terms, the component's objectives did set a direction for the program which should have been helpful to project staff and persons served.

Recommendations for Recycling Program

As a result of evaluating the three-year program of Project SPAN's elementary component, the following recommendations are made to those educators interested in replicating or recycling an elementary school career education program aimed at creating occupation awareness:

1. A component designed to make elementary school children aware of the many diverse job opportunities should be part of an overall career education program.

2. Such a component can form the basis for making classroom instruction in several content areas more meaningful to children, especially to those who are little interested in academic work and who are potential dropouts.

3. Instructional television, where available, can be a valuable vehicle for creating career awareness.

4. Any use of instructional television should be supplemented by printed material designed to form the basis for introducing television programs to pupils and for follow-up academic activities in mathematics, language arts, and so on.

5. Manual arts, of hands-on, activities permit pupils to have an enjoyable change of pace from regular classroom activities and to see the concrete results of work in different fields.

6. Preservice and inservice programs and workshops can be valuable in helping teachers to become more aware of and sensitive to the demands and rewards of various occupations and also to implement classroom career education activities in a skillful way.

7. School systems interested in elementary school career education programs should make use of the experiences of exemplary programs such as Project SPAN. Rather than beginning from scratch and developing new programs and materials, systems should consult with present and former officials of such projects and utilize to the greatest extent possible printed and audiovisual materials already completed. The television series of

Project SPAN, for example, could be adapted for use in many places, as well as the duplicated materials for use with the programs.

Field Trips

Pupils in the three elementary schools serving as SPAN demonstration centers in 1972-73 participated in at least 211 field trips, according to quarterly reports by the project's administrative office. These were in connection with the career awareness phase of SPAN and were to business, industrial, educational, cultural, and governmental sites.

III. JUNIOR HIGH SCHOOL COMPONENT

Summary

The junior high school SPAN program was originally aimed primarily at eighth and ninth grade students enrolled in home economics and industrial arts classes at Cypress and Humes Schools. Students in grade seven at these schools were included during the 1971-72 school year by the addition of units on career information integrated into the language arts and social studies curricula at the two schools. Also added to the project were grades 7-9 at Westside Junior High School.

During the 1972-73 school year, attempts were made to expand the career education concept into other subject areas in the curriculum. These included mathematics, science, and art. Junior high teachers were encouraged to develop units which would integrate their discipline areas with career education concepts. As an added inducement, the SPAN project paid a $25 stipend to any teacher who developed an acceptable unit. During the 1972-73 school year, 13 junior high school teachers submitted such units.

The major purposes of the SPAN activity at the junior high level were to increase students' awareness of the diversity of available career opportunities and to promote a positive attitude toward the world of work. Peripheral to these two overall objectives and supposedly as a consequence of them, it was hoped that the dropout rate would be reduced and that students would remain in school, thus equipping themselves more adequately for the world of work. A number of inservice activities were conducted

for the benefit of the teachers, including summer workshops at the local State university.

The overall objectives of the project were met at a reasonable level as youngsters at the junior high level became much more aware of the world of work around them. This was accomplished through the use of field trips, guest speakers, and units developed specifically for their level in their schools. In most cases, the crucial ingredient in the amount of gain made by the students was attributable to the level of interest and competency of the professional staff at the school.

Objectives

In addition to the eight overall objectives for the project, the original proposal contained two specific objectives for the junior high component. These objectives were maintained throughout the project, and were as follows:

1. Develop a relevant approach to industrial arts and home economics which will keep students in the school.
2. Develop a series of educational inserts which are designed to give students experience in making occupational choices and then enroll in appropriate courses in high school.

The second objective involves the entire curriculum, not just the vocational offerings at the junior high school level.

Scope of the Program

The purpose of the junior high component of Project SPAN was to allow youngsters in grades 7-9 in the Memphis City School System to explore in some depth a wide range of career opportunities. This was to be done not only in the traditional industrial arts and home economics

vocational type offerings, but also through the integration of career education concepts into the regular academic curriculum. At the time the proposal was made for the grant for this exemplary project, the Memphis City schools had 134,049 students enrolled, with 34,109 at the junior high level. By the end of the first year of the project, there were 150,657 students in the school system, of which 37,734 were junior high students. From that point forward, primarily because of white flight involved in the desegregation of the Memphis City schools, the enrollment began to decline. By the end of 1972, there were 143,280 students (37,104 junior high), and by the end of 1973, the enrollment had dropped to 129,523 (32,286 junior high) students.

Table III-1 gives the enrollment by school of the three junior highs in the target area for Project SPAN for 1971, 1972, and 1973. It may be noted that at Cypress Junior High School (mostly black students) the enrollment dropped by more than 350 students between the end of 1972 and the end of 1973. This was brought about because of court-ordered busing which required that all ninth grade students from Cypress be exchanged with another school for all seventh and eighth grade students at that school. Whereas the ninth graders from Cypress (mostly black students) were transported to their new school, many of the seventh and eighth grade students who were coming from the predominantly white school chose not to make the transfer and went to private schools instead. At Humes Junior High School (mostly black students), the enrollment increased from the end of 1972 to 1973. This was brought about because of the assignment of additional seventh and eighth graders to Humes from a nearby elementary school which had been for students in grades 1-8

and now became strictly a grade 1-6 school. Westside Junior High School data for 1971 are not reported here since Westside joined the project only after the 1970-71 school year. Overall, then, the project at the junior high level was concerned with a minimum of 2,122 students in the 1970-71 school year, a maximum of 3,616 students in the 1971-72 school year, and

TABLE III-1

ENROLLMENT IN SPAN JUNIOR HIGH SCHOOLS 1971-73

School	1971	1972	1973**
Cypress	1,619	1,567	1,205
Humes	1,503	1,556	1,625
Westside Junior High*	---	493	423
TOTAL	2,122	3,616	3,253

*Westside Junior High was added to the project the second year.

**The first busing to increase desegregation began during 1973.

finally a reduced number of 3,253 students during the final year of the project.

Each of the junior high schools involved in the project was staffed with a teacher coordinator. At Westside, since the high school and the junior high were relatively small and were housed in the same facility, the same individual worked with both junior and senior high school students. The duties of the teacher coordinators were to work with other faculty members in furthering the objectives of the project, to teach co-op classes for overage students who were potential dropouts, to arrange

for speakers and field trips in cooperation with the regular classroom teachers for all students in grades 7-9, to locate part-time work experiences for those students considered ready and desirous of this experience, and to do follow-up work with students and their employers. These teacher coordinators were selected on the basis of their teaching and guidance credentials and their experience with and empathy for students. Although all had backgrounds which were compatible with the concepts of the project, specific training was required on the job as they attempted to further the objectives of Project SPAN.

Evaluation

During the first year of Project SPAN, the junior high component, as were other components of the project, was involved almost entirely with the developmental phase of the concept of career education as an integrated part of the curriculum. Programs were started, materials prepared, and procedures established. The evaluation of this phase had to be, of necessity, a process evaluation. It was the opinion of the evaluators, based on on-site visits and reports from the staff of the school system that the process was well undertaken during this period and the project objectives were being advanced.

During the second year of the project, product as well as process evaluation was possible. As a part of the program to expand the experiences of students and broaden their knowledge of the variety of jobs available in the world of work, the SPAN project provided field trips for students at the junior high level in the target area schools. Also, resource speakers were brought into the schools to speak to groups of students

about various types of careers. The trips and speakers represented a broad range of career opportunities, including public services, medically-related services, communications, sales, manufacturing, foods, general services, and distribution. During the 1971-72 school year, students from Humes Junior High took 12 field trips, while those at Cypress took seven. No field trips were reported for junior high students at Westside. During the 1972-73 school year, students from Humes Junior High were taken on 16 field trips, while those from Cypress went on three. Throughout the final two years, numerous resource speakers were brought to the schools both for large group and small group presentations in cooperation with the regular classroom teachers.

One activity at the junior high level was specifically aimed at overage students who had had some difficulty in school and were in danger of dropping out. This was the junior high co-op program. The program consisted of a special class of students who had already attained their sixteenth birthdays, but were still in the ninth grade. These students were of legal age to be able to gain employment provided they had the desires, skills, and opportunities available to them. Table III-2 displays information about the co-op program for all three years of the project. Although the total number of students involved in this stage of SPAN was relatively small, it should be noted that these were very difficult students in terms of their backgrounds and a lack of success in school. As the data in this table reveal, the percentage of placement of these relatively young workers on temporary part-time co-op jobs was very high. It is notable also that most of these students continued their education at the high school level the following year. The

feedback from employers of these ninth graders--both formal (through reports they were requested to complete) and informal (in discussions with them)--was generally positive and favorable toward the program.

In line with the two objectives for the junior high school component of Project SPAN, namely that students be encouraged to stay in school and that they be given experiences in making occupational choices,

TABLE III-2

JUNIOR HIGH CO-OP PROGRAM, 1971-73

Schools	In Class			Placed on Jobs					
				1973		1972		1973	
	1971	1972	1973	No.	%	No.	%	No.	%
Cypress	17	27	13*	12	71%	20	74%	7	54%
Humes	15	32	17	13	87%	22	69%	17	100%
TOTAL	32	59	30	25	78%	44	75%	24	80%

*Five students were lost from the Cypress Co-op Class when they dropped out of the program in mid-year rather than accept a busing transfer.

two major criteria were used. First, a comparison was made regarding the rate of dropouts from the SPAN schools with these same data from the school system as a whole and from other schools with similar school bodies. As was mentioned in an earlier section of this report, the dropout rate during the third year of the project was considerably contaminated as a criterion in light of court-ordered busing to accomplish desegregation and the accompanying white flight of students from the school system. Interestingly enough, not only did the school system lose white students during

this year, but they lost some black students as well. Becuase of the contamination of data by the disruption of the school by the desegregation process, dropout data were meaningless for the final year of the project and were not included here. Data from the first and second years of the project, as reported in the 1971-72 Evaluation Report, showed some positive but inconclusive effects by Project SPAN on the dropout rate.

A standardized instrument used to ascertain occupational interests, the Gordon Occupational Checklist, was modified slightly and used to ascertain the level of interest and knowledge of junior high students in the SPAN project. The modification consisted of adding one item, which asked the students to list all the jobs they could. This item alone does not purport to measure the in-depth knowledge of students regarding the world of work, but was used as an indicator of the students' familiarity of the broad spectrum of types of occupations. Table III-3 presents the data for the mean total scores of the Gordon Occupational Checklist of the three years of the project. Included in this table are data about the three target area junior high schools--Cypress, Humes, and Westside--as well as a control school--Porter Junior High. For a discussion of the reliability and content of the Gordon, see Section III of the 1971-72 Evaluation Report on Project SPAN, submitted in August, 1972. A copy of the modified instrument is found in Appendix C.

Each year of the project, classes were selected at random from each of the target area schools (and during the 1st two years of the project in a control school), and the modified form of the Gordon Occupational Checklist was administered. Table III-3 displays total score data from these test administrations. As can be seen from these data,

the results were mixed. In some instances, the total mean scores declined during the course of the project. It is possible that this represents a narrowing of interests rather than a lack of information.

TABLE III-3

MEAN TOTAL SCORES OF THE GORDON OCCUPATIONAL CHECKLIST FOR JUNIOR HIGH STUDENTS, 1971-1973

		Girls		Boys		Total	
School	Year	No.	Mean Score	No.	Mean Score	No.	Mean Score
Cypress	1971	62	36.0	33	50.0	95	40.9
	1972	58	19.6	49	29.4	107	24.2
	1973	26	62.8	123	40.0	149	44.0
Humes	1971	51	58.1	18	29.2	69	50.6
	1972	29	34.1	26	34.0	55	34.1
	1973	78	35.8	68	32.6	146	34.3
Westside*	1972	34	29.6	35	32.5	69	31.2
	1973	32	36.5	47	40.3	79	38.8
Porter**	1972	43	29.9	51	39.4	94	35.3
	1973	76	36.6	85	33.0	161	34.5

*Westside added to project after 1971.
**Control school.

The modification of the Gordon Occupational Checklist which consisted of adding a question which was open-ended in nature allowed the students to list as many jobs as they could. Results of this question over the three-year period of the project are reported in Table III-4. At the end of the first year, the mean number of occupations listed went up sharply at both Cypress and Humes Junior High Schools. However, after the second year and the third year of the project, the number listed was

considerably smaller. No explanation seems available for this phenomenon. It seems highly unlikely in light of the activities pursued at the schools during the second and third years of the project that the students knew less about the world of work than they did after the first year. A wide range of explanations might be possible, but will not be attempted here.

TABLE III-4

MEAN NUMBER OF OCCUPATIONS IDENTIFIED BY JUNIOR HIGH STUDENTS, 1971-1973

School	Date	Girls		Boys		Total	
		No.	Mean	No.	Mean	No.	Mean
Cypress	March 1971	79	22.3	73	29.9	152	26.9
	May 1971	79	78.5	73	98.7	152	88.3
	May 1972	58	36.2	49	14.9	107	26.5
	May 1973	25	23.8	118	35.2	143	33.2
Humes	March 1971	41	38.1	13	4.5	54	32.4
	May 1971	41	96.0	13	9.6	54	75.2
	May 1972	29	28.4	26	10.0	55	17.8
	May 1973	68	20.3	50	13.7	118	17.5
Westside*	May 1972	34	43.3	35	32.8	69	38.1
	May 1973	32	38.6	41	35.9	73	37.1
Porter**	May 1972	43	19.6	51	18.5	94	19.1
	May 1973	74	21.9	79	15.7	153	18.7

*Westside added to project after 1971.
**Control school.

The availability of information regarding a wide range of occupational opportunities in the Mid-South region was one focus of the project. Although specific career choices were not likely until the senior high level, a good bit of experience was obtained by students in the junior highs relative to information systems leading them to more knowledge

about specific occupational clusters. Two programs were available to students who wanted more information than they were getting in their classes, field trips, or from guest speakers about specific occupations. One of these, Project INFOE (Information Needed for Occupational Enquiry), is a microfilm aperture card information system developed by the Research Coordinating Unit at The University of Tennessee which gives the user in-depth job information about the career of interest. It goes into some detail, giving the equivalent of four typewritten pages on each occupation, localized to the Memphis Delta region.

Another information system developed by the project is the CACI program (Computer Assisted Career Information) which uses a mark sense inquiry approach into the computer to obtain information on a wide range of career opportunities. Cards are marked at the local school, forwarded to the central office computer center, where they are processed through the CACI program. The system has been specially designed to reflect career information for nearly 500 different specific work areas in the Memphis area. Within three days, the student receives a reply--written to him by name by the computer--giving him information about job opportunities, skill and training requirements, working conditions, and pay ranges for the job he has chosen. At the same time, the computer records the student's interest, and a monthly report to the guidance counselor at each school reports all inquiries from that school and they serve as an aid to follow-up counseling. It may also help generate information of value in planning for future curricular changes and for securing appropriate speakers and field trips for groups of students with similar interests. Table III-5 reports the utilization of CACI for the 1972-73

year by junior high school students in the impact area. A request/enrollment ratio was calculated for each of the three schools and overall to give some comparative assessment of the use of this system by junior high schools.

TABLE III-5

USE OF COMPUTER ASSISTED CAREER INFORMATION SYSTEM (CACI) BY JUNIOR HIGH STUDENTS IN PROJECT SPAN, 1972-73

School	Number of Requests	1973 Enrollment	Request/Enrollment Ratio
Cypress	172	1,205	.143
Humes	185	1,625	.114
Westside	33	423	.078
TOTAL SPAN	390	3,253	.120

IV. SENIOR HIGH SCHOOL COMPONENT

Summary

The SPAN activities in the senior high target schools of Northside and Westside have been carried out through the vocational guidance and counseling centers and the cooperative work-study program. Both were successful in meeting the objectives of the project.

The counseling centers have given every indication that great efforts were made to reach all seniors and assist in their post-graduate placements. (A significant increase in placement was recorded between the 1972 and 1973 project years.) The Computer Assisted Career Information (CACI) and Information Needed for Occupational Entry (INFOE) system were running effectively by the third year. The quick-shot and mini-course have helped seniors in gaining employment both in work-study and post-graduate employment.

The effects of the SPAN project will not cease at the end of the third project year. Plans call for the school system providing funds for the continuance of CACI, inservice training, vocational consultants, resource speakers, and the vocational guidance. Perhaps this action is the most valid indicator of the project's accomplishment that it served as the initial thrust for a continuing exemplary vocational career educational program in the Memphis City School System.

Objectives

The specific objectives of the senior high school component (grades 10 through 12) were developed in the initial proposal and were applicable

during the three-year period of the project. They were as follows:

1. To develop vocational guidance and job placement centers which would direct attention to the placement and follow-up of vocational students. Additional objectives of the centers were as follows:

   a. To aid students in the selection of occupational fields of training in relation to their desires, acquired skills, innate abilities, and the forecast demands of industry and business.

   b. To give students personal guidance and counseling in order to aid them in daily problem-solving activities.

   c. To follow up on students as they progress through their training. To develop a workable relationship with each instructor in attempting to understand the potential and limits of each student.

   d. To provide pre-employment orientation in preparation for occupational applications and interviews.

   e. To develop job placement and post-high school educational opportunities for senior and graduate vocational education students within the target area's comprehensive high schools.

   f. To develop an accurate follow-up program on all students. The maintenance of adequate records to insure rapid retrieval of information was a significant goal of this objective.

   g. To develop a program of orientation for feeder junior high schools serving each comprehensive high school.

2. To develop a cooperative education program designed to give work experience to twelfth grade vocational students and those entering into employment but not having marketable skills.

3. To develop a summer or after-school basic skill program for nonvocational and noncollege-bound students which would equip them with salable skills for entry-level employment.

4. To develop programs which would give employment and future educational direction to the dropout student.

Description of the Component

The senior high school (grades 10, 11, and 12) component was implemented during the 1970-71 project year at Northside High School. This

school served a low socioeconomic neighborhood which was predominantly black. During the 1971-72 school year, the high school SPAN program was, in accordance with recommendations from the on-site evaluation of the previous year, expanded to serve students at Westside High School. The rationale for this expansion was "to include a population which will give [SPAN] an image of being a system designed to provide students from all social, racial, and economic backgrounds with the occupational information and exploratory experience necessary to develop mature and realistic concepts of their own interests, abilities, and aptitudes, toward the 'world of work' and the best means by which they can achieve these career goals." Students at Westside High were white and represented low-to-middle income families. The students of both schools comprised the target population for the 1971-72 and 1972-73 project years. Enrollments of the target schools as compared with the total senior high enrollment in the Memphis City schools during the project years are presented in Table IV-1.

TABLE IV-1

ENROLLMENT OF THE TARGET HIGH SCHOOLS COMPARED TO TOTAL SENIOR HIGH ENROLLMENTS DURING THE 1970-1973 PROJECT YEARS

Project Years	Northside High School	Westside High School	Total System	Target Schools As a Percent of Total
1970-71	1,435	---	26,618	5.02%
1971-72	1,345	383	29,244	5.90%
1972-73	1,618	329	28,178	7.26%

The senior high school students in the target population increased from 5.02 percent during the 1970-71 project year to 7.26 percent during the 1972-73 project year. The addition of Westside High School during the last two years was partially responsible for this increase.

Vocational Guidance and Job Placement Centers

The first center became functional at Northside High School during January, 1971. Early emphasis was placed upon gathering base data concerning student needs and backgrounds. Survey sheets were distributed to seniors in an effort to gather data and promote student inquiry into the services offered by the SPAN staff. Due to the problems associated with initiating the program (personnel shortages, locating and equipping offices, making initial contacts with business, and so on), few records exist attesting to the number of inquiries and follow-up counseling sessions held at Northside between January 1, 1971, and May 31, 1971. However, the co-op coordinator estimated that more than 300 counseling sessions were held during that period.

Letters were sent to all graduating seniors in May, 1971, reiterating SPAN's commitment to help graduates and dropouts in the future. This resulted in at least 200 additional counseling and/or contact sessions during the period from June 1, 1971, through August 31, 1971. Since records of contacts and counseling sessions were not available, it was not possible to give an analysis of people served (e.g., student, non-student, graduated student, dropout) during the 1970-71 project year.

Beginning in the 1971-72 project year, centers were in full operation in both Northside and Westside schools. Goals were further clarified

for the centers which included: (1) contacting all seniors in both schools in order to acquaint them with basic information about employment opportunities and provide occupational orientation and career guidance; (2) establishing individual remedial counseling and providing mini-courses and "quick-shot" programs for seniors which concentrated on basic job skills and attitudes; (3) bringing vocational-technical recruiters and industrial representatives to the schools to talk with juniors and seniors; and (4) developing a computer-assisted career information (CACI) system. Emphasis on follow-up counseling and monitoring each student's progress during vocational training was stressed. In addition, both centers gathered, sorted, and catalogued a wide variety of vocational educational materials which were available to students, teachers, and guidance counselors. A current bibliography of available literature was produced and distributed regularly.

Other activities of the centers included field trips designed to give students first-hand exposure to the vocational areas for which the SPAN courses and materials were directed.

In an effort to assess the impact of the counseling and vocational guidance centers during the 1971-72 project year, an attempt was made to ascertain the actual number of student contacts made by the counselors. Instructions were given to all counselors and SPAN personnel to fill out a special form (see Appendix D) after the first contact or counseling session with every senior and update the form after every subsequent action or interaction with the student. These forms were also given to counselors at Washington High School (control school) for comparison purposes. A summary of the pertinent data gleaned from these records is

presented in Table IV-2

TABLE IV-2

COUNSELOR RECORD ANALYSIS OF SENIOR CONTACTS AT NORTHSIDE, WASHINGTON, AND WESTSIDE DURING THE 1971-72 PROJECT YEAR*

Data Elements	Northside	Westside	Washington (Central)
Total Contacts	608	132	85
Number in in Vocational Program	295	57	11
Number of Conferences Held Regarding Selection of Occupational Fields	383	88	41

*A full disclosure of data presented by these records appear in Table IV-1 of the second year evaluation report.

However, due to the inconsistent recording practices of counselors in each school and between schools, the results could not be used to obtain valid comparisons between schools. Attempts were made to simplify the form, but reports from many counselors indicated that the record-keeping process itself curtailed their efficiency and actually reduced their time spent counseling. For these reasons, the forms to record student counseling contacts were not utilized during the third project year.

A review of the SPAN records indicated that a total of 70 bused field trips were conducted during the last two years of the project. (Table IV-3 summarizes the trips originating from each school classified according to vocational areas during each year.) The number of field trips increased significantly during the last year. Northside field trips increased 312 percent, from 16 to 46. Northside registered an increase

from two to six for a 200 percent gain. Many other field trips were also made using private transportation for which no records were kept. No bused field trips were made by Northside during the first project year due to the lack of funds budgeted for this activity during the 1970-71 budget.

TABLE IV-3

FIELD TRIPS FROM HIGH SCHOOLS DURING EACH PROJECT YEAR

Vocational Areas Visited	Northside		Westside	
	1971-72	1972-73	1971-72	1972-73
Industrial and Commercial	4	23	0	5
Educational Institutions	4	16	1	0
Public Services	4	2	1	1
Food and Lodging	2	0	0	0
Medical Facilities	2	5	0	0
TOTAL	16	46	2	6

During the 1972-73 project year, there were 40 mini-courses available to students. Students selected and subsequently received job skill training in 24 areas. At Northside, 19 mini-courses were conducted during the same period. Every senior in both schools received quick-shot training.

The Computer Assisted Career Information (CACI) system began operation in all senior high schools during the fall of 1972. The system held 370 occupational descriptions which were available to students. From its inception through June 14, 1973, there were 17,141 responses to requests

for career information produced. Northside students received 678 job descriptions while Westside students requested and received 75. The nine schools in which SPAN or Model Careers teachers were present accounted for 19.4 percent of the CACI utilization.

Retrieval of job information is an integral part of the general concepts of career information. SPAN students have access to Project INFOE, which is a printed materials resource. The system provides information on approximately 400 jobs in the Memphis area, including such facts as entry-level requirements, approximate salaries, and working conditions. The information is stored on microfiche. Students have access to this resource through the use of reader-printers located in SPAN project schools. They may secure printed copies of specific role descriptions contained in the system. No records of actual use by students are available for this report.

Placement statistics of graduating seniors at both senior high schools during the last two project years are presented in Table IV-4 The percentage of graduated students placed increased for each school. during the second year (1972-73). Northside registered the greatest increase by the placement of 94.8 percent the second year, as compared with 61.0 percent placement the preceding year. Westside placements increased from 84.8 percent to 96.0 percent.

Cooperative Work-Study Program

During SPAN's first year of operation, implementation of this phase was delayed until mid-term of 1970-71. At that time, Northside was the only high school targeted for the cooperative program. Evaluative recommendations resulted in the addition of Westside High School

TABLE IV-4

PLACEMENTS OF GRADUATED SENIORS FROM NORTHSIDE AND WESTSIDE HIGH SCHOOLS 1972 AND 1973

Status	Northside		Westside	
	1972	1973	1972	1973
College	58	113	24	34
Vocational/Technical Schools	21	63	11	21
Summer Vocational Programs	0	56	0	0
Apprenticeship Programs	0	3	4	8
Military Service	25	23	10	6
Employed Full-Time	103	108	80	50
TOTAL PLACEMENT	207	366	129	119
Unemployed	36	7	6	5
Unable to Follow Up	96	13	17	0
TOTAL GRADUATED	339	386	152	124
PERCENT PLACED	61.0%	94.8%	84.8%	96.0%

during the 1971-72 school year. The reasons for this addition have been discussed in other portions of this document. Northside and Westside High Schools were the locations of efforts to accomplish the goals of the co-op program during the 1972-73 school year.

The same staff has been retained throughout the two and one-half years of operation, encouraging continuity and revision, if needed. Basically, the co-op program seeks to accomplish the following:

1. Identification and provision for needs of individual students relative to part-time employment, fostering retention in school until completion of twelfth grade.

2. Provision for general cooperative training in daily classes, enhancing opportunities for positive interaction between job placement coordinator and students seeking part-time employment.

3. Development and continuous revision of an inventory of available employment sites, attempting to enlist the aid of those in business/industry in dissemination of information about the program.

4. Assessment or monitoring of activities of those students employed part-time to facilitate linkage between school and work.

5. Completion and follow-up studies to determine occupational, educational, and/or training destination of seniors after graduation.

Evaluation efforts to assess this phase of the SPAN Project have utilized both objective data provided by the project director and subjective observations made by staff members of the evaluation team. Over a period of six months, evaluative observations were accomplished in specific situations. These were as follows:

1. Job placement coordinator as classroom instructor in general cooperative training course.

2. Interviews with potential employers for part-time work/study students.

3. Job placement coordinator monitoring activities of students at place of employment.

Probably the most meaningful impression created by each of the job placement coordinators, when observed in many types of situations, was an attitude of positive belief in the worth of the program.

The range of potential sites for part-time employment of students is diverse. Coinciding with the 15 occupational clusters, students work in such places as hospitals, food chain stores, and tractor/farm implement dealerships, to name but a few.

Records of students enrolled in co-op classes and number of these placed in part-time employment provided the summary of data found in Table IV-5. The 100 percent placement record of students in the co-op classes reflects the successful accomplishment of this goal of the SPAN Project. Since this was done for a limited number of students, it would be conjecture to assume equal success with larger numbers. However, the results provide strong support for the inclusion of a program of this type to meet the needs of all students of the local school system.

TABLE IV-5

SENIOR HIGH CO-OP PROGRAM

School and Year	Number Enrolled in Co-op Classes	Placed on Job	
		Number	Percent
Northside 1970-71	27	25	92.6%
Northside 1971-72	25	25	100.0
Northside 1972-73	29	29	100.0
Westside 1971-72	27	27	100.0%
Westside 1972-73	22	22	100.0

Evaluation

The evaulation of the senior high school component was performed both objectively and subjectively. Many of the activities did not lend themselves to a strictly objective analysis, and to have excluded them would have resulted in a shallow and unjust account of Project SPAN at the high school level.

To assess the changes in the vocational preference of students, the Gordon Occupational Checklist (see Appendix C) was chosen. The test was administered each spring as shown in Table IV-6.

TABLE IV-6

ADMINISTRATION OF GORDON OCCUPATIONAL CHECKLIST

School	1971 Juniors	1972 Seniors	1973 Seniors
Northside	369	357	349
Westside	---	105	99
Washington	---	163	166

A comparison between the mean scores of Northside students in each of the individual interest categories over the three-year project period are presented in Table IV-7. The mean scores for each of the interest areas from the test during the first two years revealed little change in occupational interests. Preferences for all areas, except business, lessened. Since the test was administered to juniors in 1971 and to seniors in 1972, the differences may reflect the narrowing of interest by a single group of students during the period of one year. A comparison between

the 1972 and 1973 scores, however, indicates a marked difference in the preference between vocational areas. Greater preference for all vocational areas was demonstrated by the 1973 seniors. Since this comparison is between two separate groups, it indicates that the 1973 seniors held a more favorable attitude toward and interest in the vocational areas--especially business, technology, and service--than their 1972 counterparts held.

TABLE IV-7

COMPARISON OF NORTHSIDE STUDENTS' MEAN SCORES ON THE GORDON OCCUPATIONAL CHECKLIST BY OCCUPATIONAL AREA--1971, 1972, AND 1973

Occupational Area	Year		
	1971	1972	1973
Business	10.8	11.6	15.0
Outdoors	1.6	1.1	1.2
Arts	4.1	3.9	4.8
Technology	8.5	7.1	9.3
Service	6.8	6.6	9.6

A comparison beyween the Gordon mean scores and the mean number of occupations listed (students were asked to name all of the occupations they could think of) by seniors at Northside, Washington, and Westside during the 1972 and 1973 testing is presented in Table IV-8. The highest scores were made by students of Northside High School which had the largest number of students. The enrollment was predominantly black. Their higher scores may reflect an increased awareness and interest

in occupations resulting from SPAN program involvement.

Westside High School students had lower mean scores which may reflect a narrowing of occupational interest and preparation within the predominantly white student population.

These observations seem to be supported by the mean number of occupations listed by students at each of the schools; Northside students listed more and Westside students less. If, in fact, the former has broadened interest in occupations and the latter has narrowed focus on clusters of occupations, as reflected in their numbers of occupations listed.

TABLE IV-8

MEAN TOTAL GORDON OCCUPATIONAL CHECKLIST SCORES AND MEAN NUMBER OF OCCUPATIONS LISTED BY SENIORS IN THREE HIGH SCHOOLS, 1972 AND 1973

School	Mean Scores			Mean Number of Occupations Listed		
	1972	1973	Difference	1972	1973	Difference
Northside	31.1	39.9	+ 8.8	8.8	29.0	+20.2
Washington*	32.2	25.5	- 6.7	15.8	11.8	- 4.0
Westside	32.6	30.0	- 2.6	27.4	22.6	+ 4.8

*Control School.

The concept of vocational maturity is more comprehensive than vocational choice, including not only the selection of an occupation, but also attitudes toward decision-making, comprehension, and understanding of job requirements, planning activity and ability, and development of vocational capabilities. The Crites' VDI is an attitude scale

that was designed to elicit the attitudinal or dispositional response tendencies in vocational maturity which are nonintellectual in nature, but which mediate both choice behaviors and choice aptitudes. (See Appendix E.)

The test is a 50-item scale consisting of statements about an adolescent's (a) involvement in the process of vocational choice, (b) orientation toward the vocational choice problem, (c) independence in decision-making, (d) preferences for factors in vocational choice, and (e) conception of the choice process. The VDI yields a raw score ranging from 0 to 50. The higher the raw score, the greater the vocational maturity level. It has been normalized using a sample of 15,298 students in grades 7-13 from eight states--including Tennessee.

The test was administered as shown in Table IV -9. The mean scores and standard deviations from the VDI for each group at each testing are presented in Table IV-10. A comparison between mean scores of different years at each school revealed that the increase in vocational maturity of the Northside students during their senior year was significant. Comparison between different groups of seniors on a school-by-school basis indicated no significant differences. Only the 1973 Northside seniors registered a lower mean score than the preceding senior class. Comparisons between schools are presented in Table IV-11.

A comparison between the mean scores of seniors at the two SPAN senior highs and the central senior high revealed significant *t*-values of 3.78 in 1972 and 2.54 in 1973. At both testings, the seniors at Northside and Westside demonstrated a relatively higher maturity value

TABLE IV-9

ADMINISTRATION OF THE VDI

School	1971 Juniors	1972 Seniors	1973 Seniors
Northside	363	357	347
Washington	---	163	170
Westside	---	105	102

TABLE IV-10

RESULTS OF ADMINISTERING CRITES' VOCATIONAL DEVELOPMENT INVENTORY AT NORTHSIDE, WASHINGTON, AND WESTSIDE SENIOR HIGH SCHOOLS, 1971-1973

School and Year	Mean Score	Standard Deviation	t-Value
Northside (same students over two years)			
1971	31.51	5.74	2.06*
1972	32.42	6.15	
Northside			
1972-1973	32.42	6.15	-0.21
1973	32.32	6.47	
Washington			
1972	31.00	5.78	0.96
1973	31.62	6.01	
Westside			
1972	35.12	6.06	0.39
1973	35.48	6.96	
Northside and Westside Combined			
1972	33.03	6.23	0.01
1973	33.04	6.70	

*Significant at the .05 level.

TABLE IV-11

COMPARISON BETWEEN VDI MEAN SCORES OF SENIORS AT SPAN AND CONTROL HIGH SCHOOLS, 1972 AND 1973

School and Year	Mean Score	Standard Deviation	t-Value
1972			
Northside and Westside (combined)	33.03	6.23	-3.78*
Washington	31.00	5.78	
1973			
Northside and Westside (combined)	33.04	6.70	-2.54*
Washington	31.62	6.01	

*Significant at the .05 level.

than their counterparts at Washington. The mean scores of all three high schools remained below the Tennessee mean norm of 35.54, although the Westside seniors in 1973 registered a close 35.48.

Subjective evaluation of employer reaction was obtained as a result of on-site visits to various places of student employment. Of the employers interviewed, none indicated a negative reaction either toward the SPAN Project in general or toward specific students recommended by job placement coordinators.

V. ADMINISTRATIVE COMPONENT

The administrative processes required to carry out the project were satisfactorily undertaken. The SPAN staff maintained a great amount of data regarding their day-to-day operation, but they were not always consistent in the manner in which the information was compiled and reported. The project staff, including the secretaries, were cooperative in every way with the evaluative team and worked hard to supply requested data. Unfortunately, it was not always possible to find complete information in project records. This situation improved somewhat in the final year of the project.

The project director was punctual throughout the project in filing his quarterly reports and regularly furnished copies to his advisory committee, to his staff, and to the evaluation team. The required format used in these reports was consistently valid and the reports were readily understood.

Good rapport was established with the principals of the impact area schools. They were supportive of the program for the most part, and hoped the SPAN project would be continued. The seven principals in the project in its final year were surveyed with a brief instrument toward the end of the 1972-73 year (see Appendix F). Table V-1 reflects the results of this survey. As can be seen from these data, all seven administrators felt that SPAN should be a part of the curriculum and most considered the service to be of great value to students. In addition to the information shown in this table, the survey

TABLE V-1

RESULTS OF PRINCIPAL SURVEY

Survey Questions	Number of Responses
Years school was in SPAN:	
½ year	1
1 year	1
2 years	3
3 years	2
Should SPAN continue?	
Yes	7
Should SPAN be part of the curriculum?	
Yes	7
Was SPAN adequately presented to you?	
Yes	6
No	1
Were SPAN services of value to students?	
Great	5
Some	2
Should the school be responsible for providing students with entry-level skills?	
Yes	4
No	1
Not sure	2
Should guidance counselors help get students jobs?	
Yes	3
No	2
Not sure	1
Blank	1

elicited comments from the administrators concerning difficulties encountered with the project. In one case, expectations were not achieved because of the absence of a project teacher; another experienced frustration because of the change of students during the school year brought about by the desegregation process; and a third expressed a need for better text material for SPAN classes. Four principals, however, reported no difficulties whatever. On the positive side, principals reported that SPAN made children aware of many and varied occupations and vocations; that the free transportation to various businesses and industries was very useful; that films, workshops, and the availability of equipment and material was important; and that the help in getting students jobs in areas of salable skills was outstanding. One principal summed it up for his school with the statement: "SPAN is very much a part of our total school program. It has been very helpful."

A concerted effort was made to inform the public, especially the business community, of Project SPAN and its objectives. This was done by inviting employers and civic groups into the schools to see SPAN in operation, and by talking to civic and professional groups in the city. Information was disseminated to other school systems throughout the project, especially in its third year. (Dissemination activities are discussed in Section VI of this report.)

Staffing was satisfactorily accomplished, despite some difficulties. The greatest problems concerned paraprofessional staffing during the second year of the project. This problem was eliminated during the third year, since paraprofessionals were not used.

The greatest difficulty experienced or observed by the evaluation

team revolved around a breakdown in communications during the evaluation phases of both the second and third years of the project. Explicit directions regarding data collection were not always followed, thus compromising some of the assessment procedures. In every case, alternate routes to attain data were attempted with at least partial success.

Overall, the administrative activities were good. Planning and implementing a project of this type is never an easy task, but the SPAN staff were diligent in their pursuit of the project objectives.

VI. DISSEMINATION ACTIVITIES OF PROJECT SPAN

During the third year of Project SPAN activities, a major concern was to demonstrate the efficacy of career education and to disseminate as widely as possible information about the project. Several strategies for dissemination were used.

SPAN Staff Activities and Materials Development and Community Publicity and Documentation

Personnel from Project SPAN and the Memphis City School System developed audiovisual materials to tell the SPAN story. A slide-tape presentation was constructed. Brief descriptive brochures and other published materials (e.g., extra copies of SPAN handbooks and guides) were made ready for distribution. A local television station (WREC-TV, a CBS affiliate) featured a half-hour SPAN program, and a kinescope of the program (16-mm, color, and sound) was put together for use in discussing SPAN and explaining its concepts with other groups. Some of the elementary component kinescopes developed by SPAN staff and WKNO, the Memphis Public Service television station, were identified as appropriate for showing to groups as a demonstration of one of the components of Project SPAN. The elementary section of SPAN that used the 10 15-minute television presentations was available to all viewers who wished to tune in.

Radio station WMPS produced a half-hour feature of Project SPAN. Also, Project SPAN received good coverage in the local newspapers--the Memphis Commercial Appeal and the Press-Scimitar.

Dissemination Through Professional Publications

Project staff determined that it would be useful to attempt to get as broad dissemination as possible of SPAN activities through various journals. A small contract was let for bid for the development of a variety of magazine and newsletter articles. Articles were submitted under that contract to the following publications and/or associations:

Tennessee Education*	Tennessee Vo-Tech News*
The Education Catalyst*	Audio-Visual Instruction
The AVA Journal	Educational Leadership**
The Bulletin (NASSP)	Instructor Magazine
American Education**	Teacher Magazine**
Media and Materials	The Catalyst for Change*
K-Eight	Career Education News*
The Tennessee Teacher*†	National Elementary Principal (NAESP)
School Shop*	Educational and Industrial Television*

Dissemination at Conferences and Workshops

A third approach at disseminating concepts from Project SPAN included the presentation of SPAN concepts and ideas at various conferences and workshops. Specifically, SPAN staff and/or members of the evaluation staff made presentations to the following groups and/or conferences:

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*Accepted for publication.

**Still out for review at the date of this report.

†Two articles were submitted to this periodical; the briefer of the two was accepted for publication.

The Secondary School Principals, Dallas, 1973*

The American Vocational Association, Chicago, 1973

The American Association of School Administrators, Atlantic City, 1973*

The Association for Supervision and Curriculum Development, Miineapolis, 1973*

The Southern Association of Colleges and Schools, New Orleans, 1972*

The Governor's Conference on Career Education in Tennessee, 1973

The Staff of the U. S. Office of Education, Washington, D. C., April, 1973.*

Additional Coverage

SPAN received additional planned coverage in two ways: (1) listings and descriptions in the formal convention programs (AASA, ASCD, AVA, SACS, NASSP, etc.); and (2) reports from the various conferences. Two such reports initiated numerous inquiries concerning SPAN (Teacher magazine and a "Special Report of NASSP" by the editors of Education, USA).

In summary, it seems that the SPAN Project made a more than adequate attempt at broad scale dissemination of SPAN ideas. The audiovisual materials, the printed materials, the material developed for publication (and some of that which was published), and major presentations at conferences all provide evidence that the SPAN staff in good faith fulfilled its necessary obligation for dissemination of SPAN ideas and activities. The summary of evaluations from some dissemination activities shows that the dissemination activity was well-accepted. The acceptance rate of articles prepared for SPAN shows that adequate coverage of SPAN was obtained in the various journals.

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*These presentations were generally evaluated and a summary tally of the evaluation results appears in Table VI-1.

TABLE VI-1

PARTICIPANT EVALUATION OF SELECTED SPAN DISSEMINATION ACTIVITIES, 1972-73

Rating Area	SACS 12-12-72 No.	SACS 12-12-72 %	NASSP 2-6-73 No.	NASSP 2-6-73 %	AASA 2-26-73 No.	AASA 2-26-73 %	ASCD 3-20-73 No.	ASCD 3-20-73 %	USOE 4-30-73 No.	USOE 4-30-73 %	Total No.	Total %
Overall Impact*												
1	--	--	--	--	--	--	--	--	--	--	--	--
2	1	7.7	--	--	7	8.8	--	--	--	--	8	5.3
3	--	--	--	--	6	7.5	--	--	--	--	6	4.0
4	1	7.7	8	19.0	26	32.5	1	12.5	1	12.5	37	24.5
5	9	69.2	23	54.8	31	38.7	5	62.5	4	50.0	72	47.6
6	2	15.4	6	14.3	3	3.7	2	25.0	1	12.5	14	9.3
N/A	--	--	5	11.9	7	8.8	--	--	2	25.0	14	9.3
Clarity												
Poor			--	--	4	5.0	--	--	--	--	4	2.9
Fair			--	--	12	15.0	--	--	2	25.0	14	10.2
Good			42	100.0	64	80.0	8	100.0	6	75.0	120	86.9
N/A			--	--	--	--	--	--	--	--	--	--
Style												
Poor			--	--	1	1.3	--	--	--	--	1	0.7
Fair			2	4.8	30	37.5	1	12.5	2	25.0	35	25.4
Good			40	95.2	49	61.3	7	87.5	6	75.0	102	73.9
N/A												
Amount of Detail												
Poor			--	--	7	8.8	--	--	--	--	7	5.1
Fair			13	31.0	40	50.0	2	25.0	3	37.5	58	42.0
Good			29	69.0	31	38.7	6	75.0	5	62.5	71	51.4
N/A			--	--	2	2.5	--	--	--	--	2	1.5
SPAN Staff Portion												
Poor			--	--	4	5.0	--	--	--	--	4	2.9
Fair			1	2.4	23	28.8	--	--	3	37.5	27	19.6
Good			41	97.6	48	60.0	8	100.0	5	62.5	102	73.9
N/A			--	--	5	6.2	--	--	--	--	5	3.6
Evaluators' Portion												
Poor			--	--	10	12.5	--	--	--	--	10	7.3
Fair			3	7.1	20	25.0	1	12.5	1	12.5	25	18.1
Good			39	92.9	43	53.7	6	75.0	1	12.5	89	54.4
N/A			--	--	7	8.8	1	12.5	6	75.0	14	10.2

Original Questionnaire was expanded after this initial evaluation was completed.

*1 = Poor; 6 = Outstanding.

Dissemination activities also included answering inquiries about the project and especially the materials developed by it. During the third year alone at least one inquiry was received from each of the 50 states, as well as from Canada, India, West Germany, and a U. S. Air Force school in Taiwan. Materials were supplied upon request for only the cost of the paper used in duplication. Despite the minimal nature of the charges, nearly $2,600.00 was received by the school system for SPAN materials during 1972-73.

VII. PROJECT SPAN: OVERVIEW AND RECOMMENDATIONS

I. CONTEXT

Memphis, Tennessee, is one of the leading industrial and trade centers of the Mid-South. Its location on the Mississippi River has made it an influential and important city in the United States. Like many urban centers, Memphis has experienced migration by middle class white residents to suburban areas, while blacks of a low socioeconomic level have tended to concentrate in the old inner-city area.

Concern over the high dropout rate in this area and a corresponding lack of job skills among former students caused the Memphis City School System to begin a number of programs designed to improve educational and job opportunities for this segment of the population.

Project SPAN (Start Planning Ahead Now) was funded in 1969 under Part D of Public Law 90-576. The project, designed as an exemplary program, originally was intended to serve approximately 16,500 students in 20 target schools. The group constituted 11.5 percent of the total Memphis City enrollment at the time.

Important external factors affected Project SPAN during its three years of operation. One was decentralization of many administrative functions of the school system. This involved establishment of four area offices instead of one central office which previously had been the site of all administrative functions. The second external factor was court-ordered busing to help achieve better racial balance within the system. The latter occurred in the middle of the 1972-73 academic year.

The total enrollment of the system declined from 150,657 in 1971-72 to 129,523 in 1972-73. The project's target population likewise declined from approximately 16,500 in 1970-71 to 8,022 in 1972-73. Decrease in the target population largely was caused by a decision to reduce the number of elementary schools served from 15 to three.

At the end of the project it was providing direct services to two high schools, four junior high schools, and three elementary schools. These schools had the following enrollments: elementary schools--2,177; junior high schools--3,898; and high schools--1,947.

The project also provided indirect services to a far greater number of elementary school pupils in 1972-73. Study guides for use with the career awareness television programs were provided to all teachers in grades 4-6 in the Memphis City School System. These teachers had an estimated 55,500 pupils.

II. PROGRAM DESCRIPTION

Scope of the Program

Major emphasis of the program was to demonstrate a career education model serving kindergarten through the senior year of high school; to help improve attitudes of pupils toward education, the world of work, and themselves; to lower target schools' dropout rate; and to provide greater job opportunities for both dropouts and graduates of inner-city schools. The program had three major components in keeping with thinking about career education which was current at the time Project SPAN was approved. The elementary school component was designed to promote career awareness among pupils, especially those in intermediate grades. In the

junior high school, pupils were encouraged to explore in depth several of the occupational clusters presented to them in elementary school. The senior high school component stressed career focus, including job selection and job placement as well as emergency assistance to students about to quit school.

Personnel

The following personnel were employed by the project at the end of 1972-73: (1) project director; (2) elementary curriculum specialist; (3) four elementary and junior high career education resource teachers; (4) high school job placement coordinator; (5) co-op coordinator; (6) secretary; and (7) clerk-typist.

Procedures

This report covers the three years of Project SPAN from 1970-71 through 1972-73. Services provided in each of the program's three components may be summarized as follows:

Elementary component. Creating awareness of broad career clusters was emphasized through a series of 10 15-minute television programs produced in cooperation with and broadcast by Memphis' public television station. Produced for use with the programs, which were aimed at intermediate grade pupils, was a set of duplicated study guides. These outlined introductory and follow-up activities designed to relate the programs to different classroom content areas, plus psychomotor or hands-on activities in which pupils construct simple objects associated with different jobs. Elementary school teachers also were encouraged to write

their own career education units for use with different content areas.

Junior high school component. Emphasis in the career exploration phase of the project was on helping students to define their job interests, to investigate in some detail these interests, to study such job-related activities as applying for a job and writing a resumé, and to receive some work-study experiences. The junior high component utilized a microfiche series giving localized information on 400 specific jobs in Memphis, and a career exploration worktext for use in seventh grade English and social studies classes. Cooperative education classes were begun for overage junior high school students, and approximately 40 Memphis business and industrial firms helped provide job experiences for students.

Senior high school component. As part of its career focus component, Project SPAN employed job placement coordinators to help counselors advise sophomores as to which vocational classes offered by the Memphis City School System would help them realize their tentative career objectives. A computerized job placement and information system was developed for high school students to supplement the microfiche series. Aside from providing career information on request by means of printouts, the computer program also helped the counselors keep abreast of the changing job interests of different pupils. The project assisted high school teachers in developing units of study relating content areas to careers, and mini-courses dealing with job attitudes, basic skills, and other areas of student need were conducted for seniors planning to go to work after graduation. The heart of the high school program was a cooperative work-study program in which more than 90 business and industrial firms participated.

Materials Developed by Project SPAN

The following materials were developed by Project SPAN and made available to nontarget schools in the Memphis City School System and to other systems as well:

1. Film copies of the 10 television program originally recorded on videotape.
2. Teachers' guides for use with all 10 films.
3. A career development worktext for junior high school students.
4. Career education curriculum guides for use in all subject areas in grades seven through nine.
5. Occupational orientation worktext for use in home economics and industrial arts classes.

Budget

The total three-year budget for Project SPAN was approximately $429,000. Because of the changing population in the target schools, it is difficult to arrive at an accurate cost effectiveness figure for the project. The figure should be reasonably low, however, since, in addition to indirect services to the elementary schools, there were a number of similar services provided by Project SPAN to all junior and senior high schools in the Memphis City School System. For example, 1,000 copies of each of the three curriculum guides were distributed to junior high schools. Besides the units developed by teachers and distributed earlier in the project, SPAN's staff developed 40 units for elementary schools and 30 units for junior high schools during the summer of 1973. These units, which linked the study of careers to various content areas, were to be distributed throughout the entire system.

III. EVALUATION

Each of the three project components had its own objectives. Goals for the entire project also were identified. They were as follows:

1. To develop a comprehensive and continuing program of occupational guidance information and techniques which will, in all grades of school, insure that the maximum number of students in need of vocational training will enroll in such programs and that they will be helpful to bridge the gap between going to school and earning a living.

2. To develop a series of "hands on" and soft education units which will insure maximum relevance of education and skills for entering into employment.

3. To develop within the student a desire to stay in school and obtain a general education and skills for entering into employment.

4. To develop within the student the ability to appraise his occupational goals in a manner equal to his abilities, desires, and the forecasted needs of industry.

5. To develop an overall program of positive relationships with community, parents, consultants, and volunteer workers which will give students an enriched outlook on the world of work.

6. To develop all programs so the following characteristics prevail:

   a. Student develops self-understanding and self-awareness.

   b. Student recognizes and makes fuller use of his capabilities.

   c. Student develops positive adjustment to school, community, and home environments.

   d. Student develops self-confidence and self-esteem.

   e. Student develops the ability to make wise decisions.

7. To develop a series of personal inventories which, when given at grades 6, 9, and 12, will indicate realistic soundness of vocational choices.

8. To develop a complete follow-up study which will test the relevance of the total project.

Objectives for all three components stressed program inputs rather than outcomes. That is, the objectives were open rather than closed, in terms of activities and programs to be developed rather than performances to be achieved. The first year's evaluation report was mainly process oriented, suggesting adjustments and refinements that could be made in order to improve project efficiency and the quality of the services. This process evaluation was continued in part in the second year's evaluation, with a major recommendation being that the target schools of the elementary component be cut from 15 to three so that the project could provide full-time resource teachers in each demonstration school. The second year's report also contained a completed evaluation of the 10 television programs developed as part of the elementary component. These were rated on the basis of standards for such films as set down by the National Vocational Guidance Association and on the technical quality of the programs.

A panel of outside evaluators rated the programs highly in both of the above-mentioned areas. The elementary component was judged to have achieved related objectives for developing duplicated materials and psychomotor or hands-on activities for use in the classroom with the TV series. The elementary component's objective of increasing teacher sensitivity also was judged to have been achieved, with inservice workshops seen as a primary method of increasing said sensitivity.

The major purposes of the SPAN activity at the junior high level were to increase students' awareness of the diversity of available career opportunities and to promote a positive attitude toward the world of work. The overall objectives of the project were met at a reasonable level as youngsters at the junior high level became much more aware of the world of work around them.

At the senior high target schools, the vocational guidance and counseling centers have been successful in meeting the objectives of the project relative to providing a cooperative work-study program as well as providing pertinent occupational information through CACI and INFOE. The quick-shot and mini-courses offered seniors needed assistance in preparation for employment.

One of the most significant ways to assess Project SPAN's effectiveness is to note plans for its 1973-74 continuation in the Memphis City School System through local funding. All of the essential services of SPAN will be continued through local funding and actually will be made available to more students. A fourth resource teacher for elementary schools will be added, with one resource teacher operating on an itinerant basis from each of the four area administrative offices. The project also plans extensive staff development activities for next year. This will be a continuation of inservice provided by SPAN in 1972-73 to such professionals as elementary school counselors and consultants. (Consultant is an administrative staff position in the Memphis City School System; there are four such positions assigned to each area office.)

Services initiated by Project SPAN are expected to tie in well with a statewide vocational education program now in the planning stage and expected to be implemented in 1974 by the Tennessee General Assembly.

The legitimacy and value of the project's objectives were also assessed in the final evaluation report. These were judged to have been appropriate considering the context in which the program operated and the identified needs of the students served.

IV. RECOMMENDATIONS

Since the final evaluation of an exemplary project such as SPAN should deal with its implications for those interested in recycling a program, and since the Memphis City system already has plans for continuing and expanding SPAN's services, the following recommendations are made for other systems considering career education programs. The recommendations grow out of the evaluation of Project SPAN.

1. Career education should be used as one way to make classroom instruction more relevant to the career and related activities, such as writing personal resumes and preparing for job interviews.

2. All grades should be involved in a career education program, and activities should progress in a logical sequence from students' career awareness to career exploration to career focus.

3. Adequate consultative and resource assistance should be made available over an extended period of time to help teachers and counselors to implement a career education program.

4. Systems should utilize personnel, experiences, and materials of present and past exemplary programs, such as SPAN.

5. Cooperative work-study programs and job counseling and placement services should be essential parts of career education efforts.

6. New career education programs should be piloted in a few schools, problems identified, and procedures refined before being diffused through an entire system.

7. Specific process and product objectives should be drawn up for a proposed career education, based on identified needs of students. Program procedures should be planned in accordance with these objectives.

8. A new program should be evaluated by outside agencies, especially during the pilot phase.

9. Career education should be used as a means of increasing community involvement in the schools, through such activities as cooperative work-study programs, school job placement programs, field trips to community businesses and industries, and invitations for school speaking engagements to community resource persons.

APPENDICES

APPENDIX A

OCCUPATIONAL SENSITIVITY QUESTIONNAIRE AND RESULTS

Dear Teacher:

Please complete this brief questionnaire to the best of your knowledge. We are seeking information which will be helpful in evaluating Project SPAN. Please be honest and frank in your responses. You need not identify yourself or your school.

1. What grade level do you teach?
   _____

2. How many pupils are in your class?
   _____

3. Is your classroom self-contained?
   _____Yes _____No

4. If not, do you have access to a TV set to use in watching SPAN films telecast by WKNO?
   _____Yes _____No

5. How many of the SPAN films have your pupils seen this year?
   _____None _____1-3 _____4-6 _____7-10

6. In your opinion, have the SPAN films been telecast at convenient times for you to use in connection with classroom teaching?
   _____Yes _____No

7. How much time have you been able to devote each week, on the average, to preparing your pupils to view each film?
   _____Not applicable; did not see the films.
   _____Fewer than 30 minutes
   _____30 to 60 minutes
   _____More than 60 minutes

8. How much time have you been able to devote each week, on the average, to follow-up discussions of SPAN films?
   _____Not applicable
   _____Fewer than 30 minutes
   _____30 to 60 minutes
   _____More than 60 minutes

9. How much time have you been able to devote, on the average, to use of printed materials furnished by Project SPAN?
   _____Not applicable
   _____Fewer than 30 minutes
   _____30 to 60 minutes
   _____More than 60 minutes

10. If you have not been able to see see some telecasts of SPAN programs, have you been able to use a school projector to show film copies of the SPAN telecasts in your classroom?
    _____Yes _____No

11. If "yes," how many kinescopes of SPAN films have you shown in your classroom?
    _____1-3 _____4-6 _____7-10

12. If your pupils met the SPAN teacher in another room, did you regularly accompany them and remain with them during the teacher's presentation?
    _____Yes _____No

13. If the SPAN teacher worked with your pupils in your classroom, did you regularly remain in the classroom during the teacher's presentation?
    _____Yes _____No

14. How would you rate the effectiveness of the SPAN teacher in working with your pupils to disseminate career information?
    _____Ineffective
    _____Fairly effective
    _____Very effective

15. Do you feel that your principal is knowledgeable about and supportive of the goals and activities of the SPAN program?
    _____Yes _____No

16. Please make any comments you have concerning this questionnaire on the back side.

1972--THREE GROUPS 1973--SPAN TEACHERS ONLY

1. How rewarding, psychologically, do you think is work in manufacturing occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
Not Rewarding								Greatly Rewarding	

Group	Mean Rating	Group	Mean
Workshop Participants (N=21)	7.9	Elementary (N=37)	6.6
SPAN Teachers (N=61) (Elementary)	6.0	Junior High (N=70)	5.8
Control Group (N=26) (Elementary)	5.8	Senior High (N=43)	5.8

2. What level of preparation and training do you think is needed by those working in consumer and homemaking-related occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
No training Needed							Extensive training Needed		

Group	Mean Rating	Group	Mean
Workshop Participants	6.6	Elementary	6.8
SPAN Teachers	6.8	Junior High	7.3
Control Group	7.3	Senior High	7.1

3. To what degree are there opportunities for advancement in general and personal services occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
No Opportunities								A great many Opportunities	

Group	Mean Rating	Group	Mean
Workshop Participants	8.2	Elementary	6.3
SPAN Teachers	6.2	Junior High	6.5
Control Group	6.3	Senior High	6.4

4. To your knowledge, are there other occupations which are related to general and personal services occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
No Opportunities								A great many Opportunities	

Group	Mean Rating	Group	Mean
Workshop Participants	7.9	Elementary	6.0
SPAN Teachers	5.8	Junior High	6.7
Control Group	6.1	Senior High	6.5

5. How many different occupational activities are available to those working in marketing and distribution occupations? How many different kinds of work are available in this occupational field?

Rating Scale

1	2	3	4	5	6	7	8	9	10
Very limited Number								Very large Number	

Group	Mean Rating
Workshop Participants	9.4
SPAN Teachers	6.8
Control Group	6.4

Group	Mean
Elementary	6.8
Junior High	7.4
Senior High	7.7

6. To what degree is excellence of workmanship important in general and personal services occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
Not Important								Extremely Important	

Group	Mean Rating
Workshop Participants	8.0
SPAN Teachers	7.5
Control Group	8.0

Group	Mean
Elementary	7.6
Junior High	8.4
Senior High	8.8

7. How strongly would you urge your pupils to enter manufacturing occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
Would not Recommend								Strongest possible Recommendations	

Group	Mean Rating
Workshop Participants	6.9
SPAN Teachers	6.4
Control Groups	6.4

Group	Mean
Elementary	6.9
Junior High	6.3
Senior High	6.6

8. As compared with your profession, teaching, how important is distributive occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
Lesser Importance								Greater Importance	

Group	Mean Rating
Workshop Participants	7.6
SPAN Teachers	6.4
Control Group	6.9

Group	Mean
Elementary	6.7
Junior High	6.7
Senior High	6.8

9. To what degree can material presented in the elementary grades help make pupils aware of the requirements and rewards of the consumer and homemaking-related occupations field?

Rating Scale

1	2	3	4	5	6	7	8	9	10
To a very Limited degree								To a very Extensive degree	

Group	Mean Rating
Workshop Participants	8.9
SPAN Teachers	7.0
Control Group	5.7

Group	Mean
Elementary	7.4
Junior High	6.9
Senior High	7.3

10. To what degree do you feel that you are knowledgeable about marketing and distribution occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
To a very Limited degree								To a very Extensive degree	

Group	Mean Rating
Workshop Participants	6.8
SPAN Teachers	4.6
Control Group	4.3

Group	Mean
Elementary	5.9
Junior High	5.7
Senior High	5.9

11. How important do you think it is for you to be knowledgeable about the general and personal services occupational field, as such knowledge relates to your work as an elementary school teacher?

Rating Scale

1	2	3	4	5	6	7	8	9	10
Slightly Important								Extremely Important	

Group	Mean Rating
Workshop Participants	8.9
SPAN Teachers	7.3
Control Group	7.7

Group	Mean
Elementary	7.6
Junior High	7.3
Senior High	6.7

12. As compared with college study, how important is post-secondary training in manufacturing occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
Lesser Importance								Greater Importance	

Group	Mean Rating
Workshop Participants	7.3
SPAN Teachers	6.6
Control Group	6.7

Group	Mean
Elementary	6.6
Junior High	7.1
Senior High	7.0

13. In your opinion, how important is a college education in today's society?

Rating Scale

1 2 3 4 5 6 7 8 9 10

Slightly Important — Extremely Important

Group	Mean Rating
Workshop Participants	5.9
SPAN Teachers	8.2
Control Group	8.5

Group	Mean
Elementary	8.0
Junior High	7.9
Senior High	7.6

14. Please rate the contributions which you feel persons in each of the following career fields makes to society.

Marketing

1 2 3 4 5 6 7 8 9 10

Slight Contribution — Great Contribution

Group	Mean Rating
Workshop Participants	8.5
SPAN Teachers	8.1
Control Group	8.0

Group	Mean
Elementary	7.5
Junior High	7.9
Senior High	7.9

Medicine

1 2 3 4 5 6 7 8 9 10

Slight Contribution — Great Contribution

Group	Mean Rating
Workshop Participants	9.4
SPAN Teachers	9.2
Control Group	9.7

Group	Mean
Elementary	8.4
Junior High	9.2
Senior High	9.2

Manufacturing

1 2 3 4 5 6 7 8 9 10

Slight Contribution — Great Contribution

Group	Mean Rating
Wokshop Participants	8.7
SPAN Teachers	8.4
Control Group	8.6

Group	Mean
Elementary	7.9
Junior High	8.3
Senior High	8.1

Teaching

1 2 3 4 5 6 7 8 9 10

Slight Contribution — Great Contribution

Group	Mean Rating
Workshop Participants	9.1
SPAN Teachers	8.4
Control Group	9.6

Group	Mean
Elementary	8.4
Junior High	9.0
Senior High	8.9

Construction

1 2 3 4 5 6 7 8 9 10
Slight Contribution — Great Contribution

Group	Mean Rating	Group	Mean
Workshop Participants	8.7	Elementary	8.2
SPAN Teachers	8.0	Junior High	8.4
Control Group	8.7	Senior High	8.0

Office Occupations

1 2 3 4 5 6 7 8 9 10
Slight Contribution — Great Contribution

Group	Mean Rating	Group	Mean
Workshop Participants	8.3	Elementary	7.2
SPAN Teachers	7.8	Junior High	7.4
Control Group	8.0	Senior High	7.4

Practice of Law

1 2 3 4 5 6 7 8 9 10
Slight Contribution — Great Contribution

Group	Mean Rating	Group	Mean
Workshop Participants	7.9	Elementary	8.2
SPAN Teachers	8.1	Junior High	8.2
Control Group	9.0	Senior High	7.7

Homemaking-Related Occupations

1 2 3 4 5 6 7 8 9 10
Slight Contribution — Great Contribution

Group	Mean Rating	Group	Mean
Workshop Participants	8.3	Elementary	7.9
SPAN Teachers	7.5	Junior High	8.3
Control Group	8.5	Senior High	8.3

15. How strongly would you encourage your pupils to enter construction occupations?

Rating Scale

1 2 3 4 5 6 7 8 9 10
Would not Encourage — Encourage Very strongly

Group	Mean Rating	Group	Mean
Workshop Participants	7.7	Elementary	7.9
SPAN Teachers	7.2	Junior High	7.3
Control Group	7.2	Senior High	6.7

16. To what degree is excellence of workmanship important in consumer and homemaking-related occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
Not Important								Extremely Important	

Group	Mean Rating
Workshop Participants	8.3
SPAN Teachers	7.5
Control Group	8.0

Group	Mean
Elementary	8.1
Junior High	7.9
Senior High	8.0

17. How rewarding, psychologically speaking, do you think work is in the transportation occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
Not Rewarding								Greatly Rewarding	

Group	Mean Rating
Workshop Participants	8.3
SPAN Teachers	6.9
Control Group	7.0

Group	Mean
Elementary	7.7
Junior High	6.8
Senior High	6.4

18. To what degree do you feel that you are knowledgeable about general and personal services occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
To a very Limited degree								To a very Extensive degree	

Group	Mean Rating
Workshop Participants	7.5
SPAN Teachers	5.5
Control Group	5.5

Group	Mean
Elementary	7.2
Junior High	6.1
Senior High	5.8

19. To what degree are there opportunities for advancement in the manufacturing occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
No Opportunities								A great many Opportunities	

Group	Mean Rating
Workshop Participants	7.6
SPAN Teachers	6.2
Control Group	6.8

Group	Mean
Elementary	7.3
Junior High	6.9
Senior High	6.7

20. What level of preparation and training do you think is needed by those working in contruction occupations?

Rating Scale

1 2 3 4 5 6 7 8 9 10

1 = No training Needed; 10 = Extensive training Needed

Group	Mean Rating
Workshop Participants	6.7
SPAN Teachers	6.9
Control Group	7.0

Group	Mean
Elementary	7.3
Junior High	7.1
Senior High	6.3

21. To what degree are the opportunities for advancement in business and office Occupations?

Rating Scale

1 2 3 4 5 6 7 8 9 10

1 = No Opportunities; 10 = A great many Opportunities

Group	Mean Rating
Workshop Participants	7.6
SPAN Teachers	6.7
Control Group	7.5

Group	Mean
Elementary	7.7
Junior High	7.2
Senior High	6.8

22. As compared with college study, how important is post-secondary training in consumer and homemaking-related occupations?

Rating Scale

1 2 3 4 5 6 7 8 9 10

1 = Lesser Importance; 10 = Greater Importance

Group	Mean Rating
Workshop Participants	7.0
SPAN Teachers	6.6
Control Group	6.8

Group	Mean
Elementary	7.4
Junior High	7.2
Senior High	7.4

23. How strongly would you urge your pupils to enter communications and media occupations?

Rating Scale

1 2 3 4 5 6 7 8 9 10

1 = Would not Recommend; 10 = Strongest possible Recommendation

Group	Mean Rating
Workshop Participants	7.8
SPAN Teachers	7.1
Control Group	7.6

Group	Mean
Elementary	8.0
Junior High	7.8
Senior High	7.7

24. How strongly would you urge your pupils to enter consumer and homemaking-related occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
Would not Recommend								Strongest possible Recommendation	

Group	Mean Rating
Workshop Participants	7.2
SPAN Teachers	6.9
Control Group	7.1

Group	Mean
Elementary	7.3
Junior High	7.3
Senior High	7.3

25. How valuable, in your opinion, is Project SPAN in heightening vocational awareness among pupils?

Rating Scale

1	2	3	4	5	6	7	8	9	10
Of no Value								Of great Value	

Group	Mean Rating
Workshop Participants	9.7
SPAN Teachers	7.8
Control Group	7.5

Group	Mean
Elementary	6.1
Junior High	7.9
Senior High	8.5

26. Please rate the value of SPAN films in your instructional program. Omit this question if you have no knowledge of the films.

Rating Scale

1	2	3	4	5	6	7	8	9	10
Of no Value								Of great Value	

Group	Mean Rating
Workshop Participants	9.5
SPAN Teachers	7.2
Control Group	6.8

Group	Mean
Elementary	8.0
Junior High	9.2
Senior High	N/A

27. Please rate what you consider to be the value to pupils of classroom instruction in each of the following areas.

English Grammar

1	2	3	4	5	6	7	8	9	10
Of no Value								Of great Value	

Group	Mean Rating
Workshop Participants	8.7
SPAN Teachers	8.7
Control Group	8.3

Group	Mean
Elementary	8.7
Junior High	8.9
Senior High	8.2

Mathematics

1 2 3 4 5 6 7 8 9 10
Of no Value — Of great Value

Group	Mean Rating
Workshop participants	8.8
SPAN Teachers	8.9
Control Group	9.0

Group	Mean
Elementary	9.1
Junior High	9.0
Senior High	8.4

Construction Occupations

1 2 3 4 5 6 7 8 9 10
Of no Value — Of great Value

Group	Mean Rating
Workshop Participants	7.5
SPAN Teachers	6.8
Control Group	6.6

Group	Mean
Elementary	8.1
Junior High	7.5
Senior High	6.9

Science

1 2 3 4 5 6 7 8 9 10
Of no Value — Of great Value

Group	Mean Rating
Workshop Participants	7.4
SPAN Teachers	7.6
Control Group	7.6

Group	Mean
Elementary	8.3
Junior High	7.5
Senior High	7.5

Manufacturing Occupations

1 2 3 4 5 6 7 8 9 10
Of no Value — Of great Value

Group	Mean Rating
Workshop Participants	6.7
SPAN Teachers	7.1
Control Group	7.0

Group	Mean
Elementary	7.8
Junior High	7.4
Senior High	7.1

Social Studies

1 2 3 4 5 6 7 8 9 10
Of no Value — Of great Value

Group	Mean Rating
Workshop Participants	7.5
SPAN Teachers	7.5
Control Group	7.4

Group	Mean
Elementary	8.1
Junior High	7.6
Senior High	7.0

Transportation Occupations

1	2	3	4	5	6	7	8	9	10
Of no Value								Of great Value	

Group	Mean Rating
Workshop Participants	7.4
SPAN Teachers	6.9
Control Group	6.6

Group	Mean
Elementary	7.8
Junior High	7.3
Senior High	6.6

Consumer and Homemaker-Related Occupations

1	2	3	4	5	6	7	8	9	10
Of no Value								Of great Value	

Group	Mean Rating
Workshop Participants	8.4
SPAN Teachers	7.2
Control Group	7.4

Group	Mean
Elementary	7.6
Junior High	7.4
Senior High	7.5

28. Please rank each of the following instructional areas in what you consider to be their order of importance in the elementary school curriculum. Rank the most important "1", the second most important "2", and so on through "8". Do not indicate ties. Mark your ranking in the blank to the left of each item.

_____English Grammar

_____Construction Occupationa

_____Consumer and Homemaker-Related Occupations

_____Manufacturing

_____Mathematics

_____Transportation Occupations

_____Science

_____Social Studies

Modal Rankings

Instructional Area	Workshop Participants	SPAN Teachers	Control Group
English Grammar	1	1	1
Construction Occupations	5	6	7
Consumer-Homemaker Occupations	1,7	7	5
Manufacturing	8	6	6
Mathematics	1,2	2	1
Transportation Occupations	6	8	8
Science	4	4	4
Social Studies	3	3	4

APPENDIX B

REVISED WESTBROOK OCCUPATIONAL MATURITY SCALE

TEST 1

1. Mike had some job training in high school and worked hard to graduate. He is strong, dependable and cheerful. He is good at doing things with his hands, and he likes to work outside. Mike likes other people. Now he has one of these jobs. Which job do you think he has?

   A. Payroll clerk
   B. Truck driver
   C. Brick mason
   D. Night watchman
   E. I don't know

2. Which job requires the LEAST education?

   A. Typist
   B. Instrument maker
   C. Wrapper
   D. Advertising copywriter
   E. I don't know

3. Which one carries luggage in a hotel?

   A. Usher
   B. Waiter
   C. Caretaker
   D. Porter
   E. I don't know

4. Bill likes people and has always been interested in the lives and customs of others. He is friendly and outgoing, but also a good listener. He did well in history and other social science courses in high school and studied sociology in college. He joined the Peace Corps after graduation, before settling down in a particular job. He is now in one of the following occupations. Which one seems to you to be the most likely one for him to be in?

   A. College professor
   B. Playground director
   C. Social caseworker
   D. Town manager
   E. I don't know

5. When Tom was a boy, he had pets of many kinds. He always showed love and understanding for animals. In high school he did his best work in chemistry and biology. Tom stays in good shape because he enjoys outdoor activities at all times of the year. In college he studied the physical and biological sciences. After graduation he went on for the special training required for his chosen field. He is now in one of the following jobs. Which one do you think it is?

   A. Animal trainer
   B. Veterinarian
   C. Hunting guide
   D. Jockey
   E. I don't know

6. Which job is NOT in the field of PHARMACOLOGY?

   A. Compositor
   B. Bacteriologist
   C. Biologist
   D. Chemist
   E. I don't know

7. Which job does NOT require special schooling?

   A. Cab driver
   B. Nurse
   C. Computer programmer
   D. Barber
   E. I don't know

8. An OPTOMETRIST:

   A. Treats diseases of the mind.
   B. Helps people improve their sight.
   C. Provides information on use of drugs.
   D. Treats bone diseases.
   E. I don't know

9. Which one usually makes the MOST money?

   A. Fireman
   B. Chemist
   C. Typist
   D. Nurse
   E. Butcher

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10. Imagination is most important in which job?

A. Advertising artist
B. Electrician
C. Social worker
D. Librarian
E. I don't know

11. Which of the following works late at night most often?

A. Bank clerk
B. School teacher
C. Barber
D. Newspaper printer
E. Auto mechanic

12. Mary graduated from a high school where she took several business courses. Mary was not good in English, but her favorite activity was the Dramatic Club. She is a cool and alert girl, and she likes to be with other people. Now she has one of the following jobs. Which job do you think it is?

A. Mail clerk
B. Receptionist
C. Stenographer
D. Secretary
E. I don't know

13. What kind of work is usually done by a VETERINARIAN?

A. Sells feed and grain
B. Repairs farm machinery
C. Works with retired soldiers
D. Takes care of animals
E. I don't know

14. In the Army Joe was a paratrooper. In which job can he use this training?

A. Air Freight delivery
B. Forest fire fighter
C. Truck driver
D. Lumberjack
E. I don't know

15. Which job does NOT require a college education?

A. Choreographer
B. Physicist
C. Mathematician
D. Psychiatrist
E. I don't know

16. Which job is NOT in the field of EDUCATION?

A. Teacher
B. Lawyer
C. Counselor
D. Principal
E. I don't know

17. Interest in reading and studying is most helpful in which job?

A. Historian
B. Dressmaker
C. Legal clerk
D. Typesetter
E. I don't know

18. An AVIATOR:

A. Fixes equipment on an airplane
B. Checks on the operation of equipment on an airplane
C. Tells people what time the planes leave
D. Designs and builds airplanes
E. I don't know

19. Which one puts business papers in the right places?

A. Office boy
B. File clerk
C. Secretary
D. Typist
E. I don't know

20. Tom likes to draw, and he is good at it. In high school his favorite subjects were math and science. He made his lowest grades in English. After he joined the Art Club, he had his drawings and pictures in several shows. Tom is shy around people; he likes to do things alone or with one or two others. After high school, he went to a technical school. Which job do you think he has now?

A. Stage set designer
B. Plumber
C. Children's book illustrator
D. Engineer
E. I don't know

TEST 2

1. Which of the following spends the LEAST amount of time outdoors?

   A. Athlete
   B. Teacher
   C. Farmer
   D. Mailman
   E. I don't know

2. Which one would help people in making arrangements for an out-of-town trip?

   A. Airline stewardess
   B. Travel agent
   C. Porter
   D. Usher
   E. I don't know

3. An INSURANCE AGENT:

   A. Sells policies which protect against losses.
   B. Sells houses and land.
   C. Gets loans for repair of damaged property.
   D. Reviews policy applications to see how risky they are.
   E. I don't know.

4. What kind of work is usually done by an ACCOUNTANT?

   A. Collects money for bills
   B. Sells stocks and bonds
   C. Keeps business records
   D. Writes descriptions of accidents
   E. I don't know

5. What does a NURSERYMAN do?

   A. Grows tobacco
   B. Grows vegetables
   C. Manages a kindergarten
   D. Grows flowers
   E. I don't know

6. Which one makes metal printing plates?

   A. Engraver
   B. Assembler
   C. Electronic technician
   D. Engineering technician
   E. I don't know

7. Bob, a cooperative and smart boy, was well-liked by other students. He made very good grades in all subjects. Although he liked young people, he did not want to teach. His friends always found it easy to talk to him. They were not surprised when he went to a School of Social Work after high school. After he got his college degree, he did more school work to be certified for his chosen field of work. Which job do you think he has?

   A. YMCA director
   B. School counselor
   C. Police chief
   D. Minister
   E. I don't know

8. Which one designs buildings?

   A. Mechanic
   B. Architect
   C. Surveyor
   D. Engineer
   E. I don't know

9. Which job does NOT require special schooling?

   A. Cashier
   B. Nurse
   C. Barber
   D. Stewardess
   E. I don't know

10. A LANDSCAPE ARCHITECT:

   A. Raises and sells plants and shrubs.
   B. Plans and designs the outside of a building.
   C. Draws city zoning maps.
   D. Plans and designs outdoor areas.
   E. I don't know.

11. Knowing how to fix things is most important in which job?

   A. Typist
   B. Paper hanger
   C. Electrician
   D. Hairdresser
   E. I don't know

12. Alice is a very lively, friendly girl. In high school she took part in all sports activities. In college she studied physical education. She likes working with people. She is considered dependable by other students. In college Alice was elected to several important student offices. Which job do you think she has now?

A. High school physical education teacher
B. Social worker
C. Medical technician
D. Navy nurse
E. I don't know

13. An ASTRONOMER:

A. Studies the stars of the universe.
B. Studies the forms of energy and matter.
C. Predicts the future from the stars.
D. Makes rings, pins, and other jewelry by hand.
E. I don't know

14. Creativity is necessary in which job?

A. Architect
B. Home economist
C. Accountant
D. Statistician
E. I don't know

15. Which one seats people in a theater or auditorium?

A. Usher
B. Waiter
C. Porter
D. Stewardess
E. I don't know

16. Ed worked hard to get through high school where he took some business courses, but he wanted a job that would keep him out-of-doors. Tests showed that he didn't have much mechanical aptitude. He has an easy-going personality and excellent health. He has always liked to do things where he wouldn't be around too many people. He is now in one of the following jobs. Which one do you think he is in?

A. Bus driver
B. Construction foreman
C. Mail carrier
D. Auto repairman
E. I don't know

17. Which job requires the LEAST education?

A. Licensed practical nurse
B. Registered nurse
C. Electrical engineer
D. Dentist
E. I don't know

18. Which one does the LEAST amount of walking?

A. Milkman
B. Craneman
C. Mailman
D. Policeman
E. I don't know

19. Which one usually makes the MOST money?

A. Optometrist
B. Office equipment serviceman
C. Gardener
D. Construction worker
E. Mail carrier

20. Bill dropped out of high school. He worked as a mechanic's helper before he decided to go back to night school for his diploma. He likes to be around people and has a cheerful personality. He tinkers on cars a lot, and likes to travel around to see different places. He is a dependable person and level-headed in emergencies. He is now in one of the following jobs. Which job do you think he has?

A. Garage mechanic
B. Policeman
C. Interstate bus driver
D. Automobile assemblyline worker
E. I don't know

TEST 3

1. As Phil grew up in the country, he was always watching things grow. He liked to be out-of-doors. He was happiest when he could hunt or fish by himself or with a friend. He did average work in high school and then went to an agricultural college for two years. He is quiet, easygoing, and patient. He is not very good at doing things with his hands. He is now in one of the following jobs. Which job do you think he has?

   A. Soil chemist
   B. Tractor salesman
   C. Greenhouse and nursery operator
   D. Foreman in tomato packinghouse
   E. I don't know

2. Which job requires the LEAST training?

   A. Astronaut
   B. Telephone operator
   C. Doctor
   D. Hair stylist
   E. I don't know

3. The ability to speak and debate is necessary for which job?

   A. Concert singer
   B. Policeman
   C. Cab driver
   D. Lawyer
   E. I don't know

4. Which one fills prescriptions for drugs and medicines?

   A. Chemist
   B. Physicist
   C. Pharmacist
   D. Pharmacologist
   E. I don't know

5. Which job is in the area of OCEANOGRAPHY?

   A. Marine geologist
   B. Botanist
   C. Anthropologist
   D. Archeologist
   E. I don't know

6. Which of these works under the most dangerous conditions?

   A. Gardener
   B. Librarian
   C. Messenger boy
   D. Policeman
   E. Butcher

7. Harry is good at doing things with his hands and is good in art. In high school he made average grades. After high school he went to a technical school for two years to take commercial art. Harry has a way of talking that makes people comfortable. He also has good business sense. When he was a child, photography was his hobby. What job do you think he has now?

   A. Art museum director
   B. Commercial photographer
   C. Surveyor
   D. Historian
   E. I don't know

8. Which job is NOT in the field of ENTERTAINMENT?

   A. Musician
   B. Therapist
   C. Choreographer
   D. Acrobat
   E. I don't know

9. A college education is NOT required to be a

   A. Chemist
   B. Doctor
   C. Architect
   D. Carpenter
   E. I don't know

10. Being strong is necessary in which job?

    A. Lumberjack
    B. Heavy equipment operator
    C. Messenger boy
    D. Butcher
    E. I don't know

11. Which one usually makes the MOST money?

    A. Tool maker
    B. Fisherman
    C. Personnel worker
    D. Chemical engineer
    E. Auto mechanic

12. A college education is usually needed to be a?

A. Receptionist
B. Geologist
C. Actress
D. Copywriter
E. I don't know

13. Which job is in the area of LAW ENFORCEMENT?

A. Accountant
B. Stockbroker
C. Firefighter
D. Judge
E. I don't know

14. Which one usually makes the MOST money?

A. Architect
B. Teacher
C. Forester
D. Toolmaker
E. Brickmason

15. Practice fixing meals is most useful for which job?

A. Waiter
B. Dishwasher
C. Dietician
D. Bartender
E. I don't know

16. Which job requires the MOST education?

A. Barber
B. Mechanic
C. Laboratory technician
D. Secretary
E. I don't know

17. A Certified Public Accountant

A. Decides what to sell.
B. Locates and hires workers.
C. Builds up the public ideas of a business.
D. Figures out and studies business records.
E. I don't know

18. A college education is NOT required to be a:

A. Chemist
B. Architect
C. Mechanic
D. Agronomist
E. I don't know

19. Which job requires a college degree?

A. Oilwell driller
B. Window decorator
C. Policeman
D. Landscape architect
E. I don't know

20. Which job is NOT in the HOTEL INDUSTRY?

A. Surveyor
B. Caterer
C. Bellboy
D. Cashier
E. I don't know

TEST 4

1. In high school John did well in mathematics and science. He is a neat person who keeps everything in the right place. He is a good manager. He was elected president of several high school and college organizations. He had part-time summer jobs in a hospital laboratory. John always hoped that someday he could manage a business of his own. John had to graduate from a special kind of college to get ready for his job. He also had to get a state license to practice it. Which job do you think John has?

   A. Accountant
   B. Pharmacist
   C. Pilot
   D. Lawyer
   E. I don't know

2. Which job takes the LEAST training?

   A. Secretary
   B. Carpenter
   C. Mailman
   D. Hair stylist
   E. I don't know

3. Which job is NOT in the field of agriculture?

   A. Laborer
   B. Farmer
   C. Conservationist
   D. Physician
   E. I don't know

4. Which one works outdoors most often?

   A. Dressmaker
   B. Cashier
   C. Ski instructor
   D. Cook
   E. Window Decorator

5. Which job is NOT in the field of OFFICE WORK?

   A. Stenographer
   B. Accountant
   C. Bookkeeper
   D. Photographer
   E. I don't know

6. Interest in the way people act with each other is necessary for which job?

   A. Mechanical engineer
   B. Psychotherapist
   C. Computer programmer
   D. Concert singer
   E. I don't know

7. Which job is most likely to be learned through on-the-job training?

   A. Civil engineer
   B. Printing press operator
   C. Architect
   D. Pharmacist
   E. I don't know

8. Experience in 4-H Clubs is most helpful for which job?

   A. Lumberjack
   B. Fisherman
   C. Sales clerk
   D. Farmer
   E. I don't know

9. Which job is NOT in the field of HEALTH?

   A. Therapist
   B. Physician
   C. Choreographer
   D. Nurse
   E. I don't know

10. Which one works at home most frequently?

   A. Author
   B. Industrial engineer
   C. Surveyor
   D. Poll interviewer
   E. Longshoreman

11. Which one usually makes the MOST money?

   A. Farmer
   B. Dentist
   C. Mail carrier
   D. Salesman
   E. Nurse

12. Interests in sports are necessary for which job?

A. Anthropologist
B. Forester
C. Fisherman
D. Athletic director
E. I don't know

13. Which one is away from home most often?

A. Farmer
B. Teacher
C. Commercial pilot
D. Policeman
E. Accountant

14. A person who has a fear of heights would NOT likely enter which occupation?

A. Telephone lineman
B. Dressmaker
C. Window decorator
D. Carpenter
E. I don't know

15. Which one has to know the MOST about grammar?

A. Surveyor
B. Mechanic
C. Secretary
D. Engineer
E. I don't know

16. Which one advises people about legal claims or rights?

A. Judge
B. Accountant
C. Lawyer
D. Lecturer
E. I don't know

17. Which job is NOT in the field of ART?

A. Illustrator
B. Typist
C. Designer
D. Sculptor
E. I don't know

18. Which job is found in the RESTAURANT INDUSTRY?

A. Chef
B. Librarian
C. Machinist
D. Statistician
E. I don't know

19. In high school Roy was an excellent student. He was in many activities, and was always busy organizing and directing student government projects. In college he took accounting and economics. He went on to graduate school with a grant from U.S. Public Health Service. Roy has a lot of energy. He is active in sports, and he has a special skill for public speaking. Which job do you think he has now?

A. Medical doctor
B. Pharmacist
C. Hospital administrator
D. Football coach
E. I don't know

20. Which job requires special training?

A. Gardener
B. Electrician
C. Messenger boy
D. Construction laborer
E. I don't know

TEST 5

1. Which job is NOT in the field of COSMETOLOGY?

   A. Seamstress
   B. Manicurist
   C. Stylist
   D. Pedicurist
   E. I don't know

2. Good taste in colors is necessary for which job?

   A. Sociologist
   B. Surgeon
   C. Interior decorator
   D. High school teacher
   E. I don't know

3. Which job is NOT in the field of AVIATION?

   A. Flight engineer
   B. Copywriter
   C. Stewardess
   D. Navigator
   E. I don't know

4. Which one would select paintings to fit the decor of a home?

   A. Arranger
   B. Choreographer
   C. Interior designer
   D. Fashion designer
   E. I don't know

5. Which job is in the field of SALES?

   A. Insurance broker
   B. Bank clerk
   C. Psychologist
   D. Craneman
   E. I don't know

6. A hobby of rock collecting and cave exploration is most useful for which job?

   A. Biologist
   B. Oil-well driller
   C. Geologist
   D. Bricklayer
   E. I don't know

7. Experience as a kitchen helper is most useful for which job?

   A. Restaurant cook
   B. Instrument maker
   C. Gardener
   D. Nurse
   E. I don't know

8. Which job is in a DRIVING OCCUPATION?

   A. Auto mechanic
   B. Flame cutter
   C. Routeman
   D. Highway surveyor
   E. I don't know

9. Which one would engineer the building of a space craft?

   A. Aeronautical engineer
   B. Electrical engineer
   C. Electronic engineer
   D. Mechanical engineer
   E. I don't know

10. Which job requires the LEAST training?

   A. Hair stylist
   B. Mailman
   C. Secretary
   D. Pilot
   E. I don't know

11. Which of the following spends the MOST amount of time at a desk?

   A. Policeman
   B. Actress
   C. Carpenter
   D. Secretary
   E. I don't know

12. Which does NOT have to work with tools?

   A. Barber
   B. Mechanic
   C. Carpenter
   D. Milkman
   E. I don't know

13. Which one usually makes the MOST money?

A. Lawyer
B. Librarian
C. Automobile mechanic
D. Bank teller
E. Peddler

14. What kind of work does a SURVEYOR do?

A. Sells stocks and bonds
B. Oversees workers in a factory
C. Determines property lines
D. Designs roads and highways
E. I don't know

15. Which job usually requires the MOST education?

A. Chemical engineer
B. Teacher
C. Surveyor
D. Surgeon
E. I don't know

16. Which one makes the MOST money usually?

A. Law clerk
B. Psychotherapist
C. Cashier
D. Social worker
E. Night watchman

17. Working odd hours is NOT important in which occupation?

A. Sales clerk
B. Newspaper reporter
C. Electrical engineer
D. Mail carrier
E. I don't know

18. Which job is NOT in the field of CONSTRUCTION?

A. Surveyor
B. Architect
C. Carpenter
D. Mechanic
E. I don't know

19. Which job requires the MOST training?

A. Sales clerk
B. Baker
C. Machinist
D. Telephone operator
E. I don't know

20. John was an average student in high school; but he had a hard time in college, where he had chosen economics as his major subject. He worked part-time at a restaurant during all of his college years, and eventually became assistant to the manager. He gets along well with other people and is a good talker. He is now in one of the following jobs. Which job do you think he has?

A. High school social studies teacher
B. Salesman for a frozen food company
C. Hotel manager
D. Restaurant operator
E. I don't know

TEST 6

1. Which job is in the field of AGRICULTURE?

   A. Farmer
   B. Hair stylist
   C. Housewife
   D. Carpenter
   E. I don't know

2. Which job is NOT in the field of PUBLISHING?

   A. Editor
   B. Author
   C. Pianist
   D. Printer
   E. I don't know

3. Which job is NOT in the field of TRANSPORTATION?

   A. Truck driver
   B. Stewardess
   C. Mechanic
   D. Architect
   E. I don't know

4. Which job is NOT in the field of PERSONNEL?

   A. Interviewer
   B. Veterinarian
   C. Personnel clerk
   D. Psychologist
   E. I don't know

5. Jane graduated from a consolidated high school in a rural area. She was active in 4-H programs and especially enjoyed the home management and food processing projects that she worked on. She was very good at organizing and managing home economics club projects in high school. Her best grades were in chemistry, biology, and mathematics; her poorest ones were in English. She went on to a four-year science program at the state university. She is now in one of the following occupations. Which job do you think she has?

   A. Food editor for a newspaper
   B. Dietitian
   C. Elementary school teacher
   D. Waitress
   E. I don't know

6. Which of these works MOST with groups of people?

   A. Teacher
   B. Mailman
   C. Secretary
   D. Chemist
   E. I don't know

7. Which job requires the LEAST knowledge of mathematics?

   A. Teacher
   B. Pilot
   C. Mailman
   D. Store clerk
   E. I don't know

8. Which one makes the MOST money?

   A. Hotel front office clerk
   B. Hotel bell boy
   C. Hotel manager
   D. Cook
   E. Maid

9. Which job requires the LEAST training?

   A. Athlete
   B. Policeman
   C. Mechanic
   D. Milkman
   E. I don't know

10. Marine biologists usually have at least:

    A. A college degree
    B. A high school diploma
    C. Two years of high school
    D. A grade school education
    E. I don't know

11. Which job requires the LEAST training?

    A. Elevator repairman
    B. T.V. repairman
    C. Longshoreman
    D. Bookkeeper
    E. I don't know

12. Interest in helping others IS necessary for which job?

A. T.V. repairman
B. Nurse
C. Farmer
D. Stenographer
E. I don't know

13. The skill of sewing is most useful for which job?

A. Nurse
B. Seamstress
C. Surgeon
D. Interior decorator
E. I don't know

14. The ability to express oneself in writing IS necessary in which job?

A. Civil engineer
B. Actor
C. Secretary
D. Author
E. I don't know

15. Success in writing stories IS necessary for which job?

A. Journalist
B. Playground director
C. Aircraft mechanic
D. Physical therapist
E. I don't know

16. A CARPENTER:

A. Finishes concrete surfaces.
B. Makes walls and chimneys from brick.
C. Puts up the wood framework in buildings.
D. Covers pipes and boilers with insulation.
E. I don't know

17. What kind of work is done by a DIETICIAN?

A. Sterilizes instruments in a dental clinic.
B. Supervises exercise and weight control at health clubs.
C. Sells books on how to reduce.
D. Plans menus and supervises preparation of meals.
E. I don't know

18. A PHARMACIST:

A. Helps persons with bone diseases to overcome their problems.
B. Treats people's illnesses and prescribes medicines.
C. Sells drugs and medicines and tells how to use them.
D. Studies the processes that food is digested.
E. I don't know

19. Which one handles payments and withdrawals in a bank?

A. Teller
B. Cashier
C. Bookkeeper
D. Currency sorter
E. I don't know

20. A DATA PROCESSING EQUIPMENT SERVICEMAN:

A. Repairs and maintains traffic counters
B. Repairs and services dictating machines
C. Maintains and repairs duplicating machines
D. Installs and maintains computers
E. I don't know

APPENDIX C

GORDON OCCUPATIONAL CHECK LIST

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Gordon Occupational Check List

BY LEONARD V. GORDON

NAME _____ DATE _____

GRADE OR CLASS _____ AGE _____ SEX _____

SCHOOL _____ CITY OR TOWN _____

						TOTAL

B O A T S

DIRECTIONS

This Check List was prepared to help you indicate the kinds of work you are interested in doing. It includes a list of activities that are performed in many different kinds of jobs. You are asked to read the list and underline each activity that you would like to do.

You may not be completely familiar with some of the activities. Some of the activities require training that you have not yet had. This need not influence your choice. Consider each activity and then decide whether, after some training, you would like to perform the activity. Underline only those activities that you would like to perform as part of regular, full-time employment.

These are the steps for you to follow:

First step: Read slowly through the list and when you come to an activity that you would like to do on the job, underline it, like this

149. build or repair barrels or kegs

Second step: After you have gone through the entire list, look back over all the activities that you have underlined. Then circle the numbers in front of the activities that you would like to do *the very most,* like this

(149) build or repair barrels or kegs

Third step: Answer the questions on pages 5 and 6.

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First Step: Read the list slowly, and as you come to an activity that you would like to do as part of a full-time job, underline it.

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1. sort and deliver mail, messages and packages
2. do routine sorting, numbering and stapling
3. operate a duplicating machine
4. file letters, bills and receipts
5. type routine letters and statements
6. keep records of goods received and stock on hand
7. select and package goods ordered by customers
8. determine the best routes for deliveries

9. grow fruits or nuts commercially
10. grow a variety of vegetables for market
11. grow wheat, oats, barley or rye
12. breed and raise livestock
13. raise chickens for eggs or meat
14. maintain a herd of cattle for milk production
15. train or take care of horses
16. perform a variety of duties on a small farm

17. sort, grade and pack fruits and vegetables
18. cook fruits, vegetables or meats for canning
19. operate can-sealing equipment in a cannery
20. make, wrap and package candies
21. grade food products according to quality
22. operate pasteurizing equipment in a dairy
23. bake bread, cake or pastry in a bakery
24. cut and trim meat in a market

25. make or alter clothing
26. operate a loom or knitting machine
27. dye cloth in a dyeing machine
28. cut fabric or leather according to a pattern
29. sew heavy fabric on a power sewing machine
30. wash or iron clothing in a laundry
31. dry-clean or press suits and other garments
32. repair shoes and other leather goods

33. clean and maintain office or other buildings
34. make beds and clean rooms in a hotel
35. carry baggage and perform services in a hotel
36. register and assign rooms to hotel guests
37. make travel arrangements for people
38. attend to the comfort of airline passengers
39. make all arrangements for large social affairs
40. sort, shelve and check out books in a library

41. operate a telephone switchboard
42. gather information for reports or catalogs
43. read and answer customers' letters
44. receive and make appointments for callers
45. get information from charge account applicants
46. give information or directions to customers
47. type letters from dictation or dictaphone
48. work as a private secretary

49. operate a tractor or other machinery on a farm
50. plant or care for flowers, shrubs or lawns
51. grow trees, plants and flowers in a nursery
52. work as part of a survey crew
53. help explore for mineral or oil deposits
54. help maintain campgrounds in a national forest
55. trap game for meat, skins, or for live sale
56. be a hunting or fishing guide

57. pour molten metal into molds
58. melt ore to extract the metal
59. make objects from sheet copper or brass
60. make parts or objects out of sheet metal
61. make tanks or boilers out of steel plate
62. fuse metal parts together by welding
63. cut, groove and shape metal by machine
64. make metal parts by heating and hammering

65. fire and tend a large commercial furnace
66. maintain proper steam pressure in a boiler
67. make patterns for cutting or casting
68. plate metal objects with nickel, silver or gold
69. plan designs for dies, tools, jigs and fixtures
70. make or repair shop tools or parts
71. move or install heavy industrial machinery
72. load or unload trucks or ship's cargo

73. work behind a soda fountain
74. prepare or cook food in a restaurant
75. work as a helper in a restaurant kitchen
76. wait on table in a restaurant or club
77. be in charge of a dining room or private club
78. seat patrons at a theater or at sporting events
79. give haircuts and shaves
80. give facials, shampoos, or style hair

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81. keep accurate records of sales and payments
82. check entries in records and bills for accuracy
83. compute wages of company employees
84. prepare bills and invoices for customers
85. perform computations on a calculating machine
86. operate a key punch or other business machines
87. handle deposits and withdrawals in a bank
88. work as a cashier in a store or restaurant

89. mine for metal ore or coal
90. blast with dynamite or nitroglycerine
91. use instruments to detect and measure radiation
92. do maintenance or construction at great heights
93. cut, load and haul logs in a forest
94. work underwater using diving or SCUBA equipment
95. catch fish for commercial purposes
96. be a member of a ship's crew

97. assemble parts for radio or television sets
98. repair radio and television sets
99. repair refrigerator and air conditioning units
100. repair electric motors and generators
101. fix appliances such as fans, toasters and irons
102. operate and maintain broadcasting equipment
103. make tests on experimental electronics components
104. erect and maintain power or telephone lines

105. straighten automobile fenders and bodies
106. repair and overhaul automobile engines
107. inspect, repair and overhaul aircraft engines
108. maintain a ship's engines, boilers and pumps
109. keep industrial machinery in operating condition
110. assemble motor parts on a subassembly line
111. assemble small mechanical units for airplanes
112. test or evaluate newly designed engines or parts

113. service automobiles in a gasoline station
114. drive a taxicab
115. be a chauffeur for a company or private family
116. operate a public bus or streetcar
117. deliver products over an established route
118. work as a conductor on a railroad
119. operate a passenger elevator
120. pilot an airplane for commercial purposes

121. interview people who apply for jobs
122. try to collect overdue accounts from customers
123. talk with customers about their complaints
124. ask people questions for an opinion poll
125. demonstrate new products in a store
126. take orders from customers over the telephone
127. set up production schedules to meet orders
128. investigate and settle insurance claims

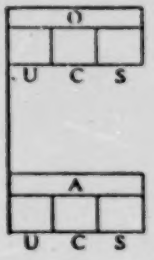
129. design jewelry or other art objects
130. design sets for the theater
131. design new types or styles of wearing apparel
132. create designs for fabrics, wallpaper or linoleum
133. paint or decorate pottery or porcelain
134. prepare advertising copy or displays
135. arrange displays in store windows or showcases
136. plan interiors for homes, hotels, or clubs

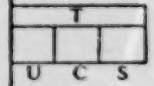
137. install or repair plumbing in houses
138. plaster walls and ceilings
139. paint houses or buildings
140. erect framework, joists and partitions in houses
141. put flooring, cabinets and doors in new houses
142. apply or fasten roofing to houses
143. install or connect electrical wiring systems
144. fit and install gas, water and air pipes

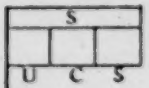
145. make brick walls, chimneys or fireplaces
146. finish concrete surfaces on walks or driveways
147. cut and shape sandstone, marble or granite
148. assist in placing steel girders and columns
149. lift or move objects with a crane or hoist
150. operate a bulldozer, power shovel or grader
151. drive a heavy truck or van
152. contract for the building of houses

153. guard property against theft or illegal entry
154. stand guard at a plant or building entrance
155. inspect establishments for cleanliness or safety
156. be in charge of inmates in a jail or prison
157. patrol a neighborhood on foot or in a police car
158. work as a detective or private investigator
159. assist in fighting fires
160. be a member of the armed forces

181.	sell goods or services to people	201.	operate or manage a small retail shop or store
182.	sell merchandise or services over the telephone	202.	operate or manage a small business or service
183.	be a salesperson in a department store	203.	manage a motel or small hotel
184.	wait on customers in a variety or drug store	204.	supervise foremen in a plant or factory
185.	sell merchandise or take orders from door to door	205.	be in charge of an office or sales staff
186.	sell goods, at wholesale, to stores or companies	206.	buy supplies for the use of an organization
187.	sell automobiles or major household appliances	207.	buy and price merchandise for a retail store
188.	sell insurance, securities or real estate	208.	decide whether to give people loans or credit
189.	take photographs, develop film and make prints	209.	operate a projector in a motion picture theater
190.	sketch or paint pictures of scenes or people	210.	assist with props, lights or cues in a theater
191.	draw cartoons or illustrations	211.	perform on a stage or in a night club
192.	make signs or posters	212.	perform or appear on radio or television
193.	write stories, reports or news articles	213.	be a professional musician or singer
194.	write material for television or radio	214.	be a professional dancer
195.	obtain engagements for entertainers or speakers	215.	work as a model
196.	promote publicity for individuals or organizations	216.	be a professional athlete
197.	convert hides to leather with tanning solution	217.	prepare type or plates for printing
198.	mix pigment, oil and thinner to make paint	218.	engrave lettering or designs in printing plates
199.	mold clay to make dishes or pottery	219.	take readings of pressure, temperature and wind
200.	prepare rubber compounds for use in making tires	220.	prepare accurate working plans or drawings
201.	mold plastic objects by machine	221.	check dimensions of parts against a blueprint
202.	make chemical tests or analyses of materials	222.	inspect parts or products for flaws or defects
203.	operate equipment for making glass	223.	assist engineers in design of machine parts
204.	operate equipment for producing gasoline from oil	224.	take and classify fingerprints
205.	upholster chairs or couches	225.	clean and remove deposits from people's teeth
206.	make, repair or refinish wooden furniture	226.	assist a dentist in pulling teeth
207.	make or repair jewelry or ornaments	227.	make dental plates, inlays and bridgework
208.	carve designs on wood or stone	228.	perform routine tests in a laboratory
209.	grind lenses for binoculars or spectacles	229.	test urine and make blood counts
210.	clean and repair watches and clocks	230.	take, develop and interpret X-ray pictures
211.	repair, clean and adjust office machines	231.	give first aid treatment to accident cases
212.	repair locks and change safe combinations	232.	assist an undertaker or embalmer
213.	take care of infants or very small children	233.	supervise the play of young children
214.	assist nurses by bathing and serving patients	234.	organize club activities in a community center
215.	do practical nursing in a private home	235.	coach athletic games or teach sports
216.	watch and care for mental patients	236.	conduct a group in body building exercises
217.	teach handicraft to handicapped persons	237.	teach or instruct a class or group
218.	be a companion to a blind or older person	238.	work as an interpreter or translator
219.	manage a home for a private family	239.	act as a guide to sightseers or tourists
220.	care for animals in a veterinary hospital	240.	work as a member of a religious organization







Second Step: Look back over the items you have underlined and circle the numbers in front of the activities which you would like to do the very most.

Third Step: Turn to the next page.

Third Step: Please answer the following questions:

List all the occupations (jobs) you can.

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APPENDIX D

HIGH SCHOOL COUNSELOR RECORD FORM

_____ HIGH SCHOOL

MEMPHIS CITY SCHOOLS
SPAN - COUNSELOR RECORD
1971 - 72

This form should be marked each time a student has contact with the counseling or SPAN office. See reverse side for instructions.

(4-6) Name _____ (7-8) Grade _____

(9-12) Date of Birth [ ][ ][ ][ ] (Mo. Yr.) (13) Sex [1] M [2] F

(14) [1] Check here if student is in a vocational program.

(15) [0 1 2 3 4 5 6 7 8 9 or more] Conference held regarding selection of occupational field.

(16) [0 1 2 3 4 5 6 7 8 9 or more] Student selected a field of occupational interest and indicated it positively to counselor.

(17) [0 1 2 3 4 5 6 7 8 9 or more] Conference held regarding daily problem or personal matter.

---

(18) [1] Check here if student enrolled in a summer basic skills program.

(19) [1] Check here if student did NOT complete summer basic skills program.

(20) [0 1 2 3 4 5 6 or more] Student placed in a co-op program.

(21) [1] Check if student failed to complete a co-op work program. Complete next item.

(22) [0 1 2 3 4 5 6 or more] Check number of months (rounded to nearest) he (she) worked in incompleted assignment.

(23) 1 ☐ Check if student failed to complete a second co-op work program. Complete next item.

(24) 0 1 2 3 4 5 6 or more ☐☐ Check number of months (round to nearest) he (she) worked on the second incompleted assignment.

(25) 1 ☐ Check if student failed to complete three or more co-op work assignments.

(26) 1 ☐ Check if student was placed in a job after graduation at least in part through effort of counselor (SPAN or Guidance Office).

(27-28) What type job? _____

(29) 0 1 2 3 4 5 6 7 8 9 or more ☐☐ Check each time (up to 9) the student was enrolled in pre-employment orientation as a part of Project SPAN.

(30) 0 1 2 3 4 5 6 or more ☐ Check each time (up to 6) the student was enrolled in an after school basic skills program.

(31) 0 1 2 3 4 5 6 or more ☐ Check each time (up to 6) the student failed to complete an after school basic skills program for which he enrolled.

APPENDIX E

CRITES' VOCATIONAL DEVELOPMENT INVENTORY

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DIRECTIONS:

There are a number of statements about occupational choice and work listed in this booklet. Occupational choice means the kind of job or work that you think you will probably be doing when you finish all of your schooling.

If you agree or mostly agree with the statement, use your pencil to blacken the circle in the column headed *T* on the separate answer sheet. If you disagree or mostly disagree with the statement, blacken the circle in the column headed *F* on the answer sheet. Be sure your marks are heavy and black. Erase completely any answer you wish to change.

Part I

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1. Once you choose a job, you can't choose another one.
2. In order to choose a job, you need to know what kind of person you are.
3. I plan to follow the line of work my parents suggest.
4. I guess everybody has to go to work sooner or later, but I don't look forward to it.
5. A person can do any kind of work he wants as long as he tries hard.
6. I'm not going to worry about choosing an occupation until I'm out of school.
7. Your job is important because it determines how much you can earn.
8. Work is worthwhile mainly because it lets you buy the things you want.
9. The greatest appeal of a job to me is the opportunity it provides for getting ahead.
10. I often daydream about what I want to be, but I really haven't chosen a line of work yet.
11. Knowing what you are good at is more important than knowing what you like in choosing an occupation.
12. Your parents probably know better than anybody which occupation you should enter.
13. If I can just help others in my work, I'll be happy.
14. Work is dull and unpleasant.
15. Everyone seems to tell me something different; until now I don't know which kind of work to choose.
16. I don't know how to go about getting into the kind of work I want to do.
17. Why try to decide upon a job when the future is so uncertain.
18. I spend a lot of time wishing I could do work that I know I cannot ever possibly do.
19. I don't know what courses I should take in school.
20. It's probably just as easy to be successful in one occupation as it is in another.
21. By the time you are 15, you should have your mind pretty well made up about the occupation you intend to enter.
22. There are so many things to consider in choosing an occupation, it is hard to make a decision.
23. I seldom think about the job I want to enter.
24. It doesn't matter which job you choose as long as it pays well.

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25. You can't go very far wrong by following your parents' advice about which job to choose.
26. Working is much like going to school.
27. I am having difficulty in preparing myself for the work I want to do.
28. I know very little about the requirements of jobs.
29. The job I choose has to give me plenty of freedom to do what I want.
30. The best thing to do is to try out several jobs, and then choose the one you like best.
31. There is only one occupation for each person.
32. Whether you are interested in a particular kind of work is not as important as whether you can do it.
33. I can't understand how some people can be so set about what they want to do.
34. As long as I can remember I've known what kind of work I want to do.
35. I want to really accomplish something in my work—to make a great discovery or earn lots of money or help a great number of people.
36. You get into an occupation mostly by chance.
37. It's who you know, not what you know, that's important in a job.
38. When it comes to choosing a job, I'll make up my own mind.
39. Choose an occupation which gives you a chance to help others.
40. When I am trying to study, I often find myself daydreaming about what it will be like when I start working.
41. I have little or no idea of what working will be like.
42. Choose an occupation, then plan how to enter it.
43. I really can't find any work that has much appeal to me.
44. Choose a job in which you can someday become famous.
45. If you have some doubts about what you want to do, ask your parents or friends for advice and suggestions.
46. Choose a job which allows you to do what you believe in.
47. The most important part of work is the pleasure which comes from doing it.
48. I keep changing my occupational choice.
49. As far as choosing an occupation is concerned, something will come along sooner or later.
50. Why worry about choosing a job when you don't have anything to say about it anyway.

APPENDIX F

PRINCIPALS' QUESTIONNAIRE

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Dear Principal:

Please complete this brief questionnaire to the best of your knowledge. We are seeking information which will be helpful in evaluating Project SPAN. Please be honest and frank in your responses. You need not identify yourself or school.

Grades served by your school: _____

Has your school participated directly in Project SPAN? ___Yes ___No
If yes, for how many years? _____

Was the career education emphasis of SPAN adequately presented to you and your staff? ___Yes ___No ___Not sure

Do you feel that career education should be a part of the curriculum at your school? ___Yes ___No ___Not sure

Do you think that Project SPAN provides a service of value to your students? ___Great ___Some ___None

Do you think the school should be responsible for providing its students with entry-level skills for jobs? ___Yes ___No ___Not sure

Do you think guidance counselors should be expected to help students get jobs as well as help those who seek additional training? ___Yes ___No ___Not sure

What special difficulties or problems has the SPAN project brought to your school?

What assistance has the SPAN project given you?

Would you like to see the SPAN concept continued in your school? ___Yes ___No ___Not sure

Please add any additional comments on the back of this sheet which you think will help the SPAN officials evaluate the project.